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In re Application of:

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BENCHMARKING

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#### SUPPLEMENTAL DECLARATION UNDER 37 C.F.R. § 1.131

Sir:

I, Jennifer S. Green, hereby declare that I am a coapplicant in the above-identified patent application and that I
am also a co-inventor of the invention that is described and
claimed in the above-identified patent application. I also
hereby declare that prior to May 15, 2000, my co-inventors and I
conceived of the invention that is described and claimed in the
above-identified patent application as evidenced by the
following:

1. Prior to May 15, 2000, my co-inventors and I conceived of the invention in the United States. At the time of the invention, I owed a duty of assignment of the invention to Chironet, LLC (hereinafter "Chironet").

- 2. Shortly after my co-inventors and I conceived of the invention, my co-inventors and/or I prepared a description of the invention for purposes of defining system requirements and for guiding hardware/software development of a system embodying the invention. A date redacted copy of the description of the invention (i.e., our invention disclosure) is attached hereto as Exhibit A.
- A system embodying the invention as described in our 3. invention disclosure was actively developed until completion of an initial version of the system. Proof of the active development of the system embodying the invention as described in our invention disclosure is provided herein as: (1) a letter agreement between Chironet and Social & Scientific Systems, Inc. (SSS), setting forth that SSS will provide advice on procuring hardware, software, and Internet connectivity; hypertext markup language (HTML) and graphics design services; computer programming; and ongoing technical support, all related to developing the system embodying the invention as described in our invention disclosure (see Exhibit B); (2) invoices from SSS to Chironet relating to the above-described agreement (see Exhibit C); (3) a marketing agreement between Surgical Outcomes (of which Chironet is an affiliate) and McKesson General Medical Corp. (McKesson), setting forth that McKesson will provide promotion and marketing services to Surgical Outcomes relating

to the system embodying the invention as described in our invention disclosure (see Exhibit D); and (4) a letter from Chironet to SSS requesting assistance in reviewing final documentation for the system embodying the invention as described in our invention disclosure (see Exhibit E).

- 4. Upon completion of the initial version of the system, details of the initial version of the system were provided by Chironet to outside patent attorneys for preparation of a provisional patent application encompassing the invention.
- 5. On November 21, 2000, the above-identified provisional patent application was filed. A copy of the filing receipt for this provisional patent application is attached hereto as Exhibit F.
- 6. Between November 21, 2000, and November 20, 2001, my co-inventors and/or I had several discussions regarding our invention disclosure and the provisional patent application with the outside patent attorneys, and provided additional supporting materials to the outside patent attorneys, all intended to assist the outside patent attorneys in converting the provisional patent application into a utility patent application encompassing the invention.
- 7. On November 20, 2001, the above-identified utility patent application was filed. A copy of the filing receipt for the application is attached hereto as Exhibit G.

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I further hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: 3/6/06

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#### EXHIBIT A



# SOIX Report System User's Manual

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#### The structure of report folders on the SOIX private web site

The structure of report folders on the SOIX private web site is the following:

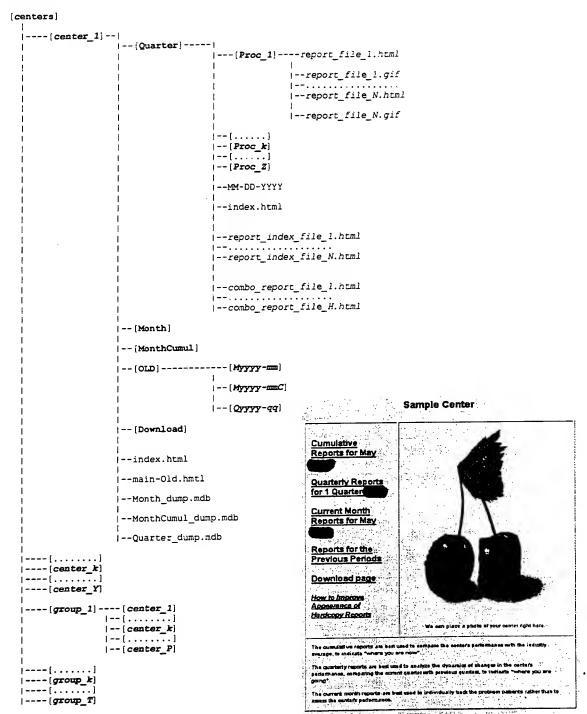


Fig. 2. Home page for Sample center.

Fig.1 The structure of report folders. (All names typed in italic font are used for the generic description. They don't correspond to any real names. Square brackets are used to distinguish folders and files)

The folder [centers] is located in the root directory of the SOIX private web server (current location of the root directory is "C:\SOIX\WebSites\SOIX\centers"). Folders [center\_1], ..., [center\_k], ..., [center\_Y] are centers report directories. The name of a center's directory is a three letter USERCODE of the center (Example: AAA,

AAB, MFA). Each centers its own home page - [center\_k] hdex.html file. In Fig.2 you can see an example of the home page.

Each center's folder has involved file structure. Let's consider this structure in more details. Folders [Month], [Quarter] and [MonthCumul] are used to store "Current Month Report", "Quarterly Reports" and "Cumulative Reports", respectively.

[OLD] folder is used to store "Reports for the Previous Periods". Each folder inside [OLD] represents reports for a certain period. Folders for quarterly reports have [Qyyyy-qq] names, where "yyyy" is a year in four digit format and "qq" is a quarter number with a leading zero (Example: "Quarter 03" - reports for third quarter of the control of the

Folder [Download] is used to store center specific files, like "ftprun.run" or updates and patches for OMS program.

Microsoft Access database files (Month\_dump.mdb, MonthCumul\_dump.mdb and Quarter\_dump.mdb) contain procedure-level data calculated by the report system. These files store data for "Current Month Reports", "Cumulative Reports" and "Quarterly Reports" respectively. Almost all parts of the report system use these files – not the original Medical Record and Patient Interview patient-level tables.

[Month], [Quarter], [MonthCumul] and sub-folders of [OLD] folder contain reports for different periods but all of them have the same structure, so let us consider the [Quarter] folder only. All report pages can be divided into the two groups:

- 1) report pages that show information only for a specific procedure group (in current version of the report system these files include a chart and a table corresponding to this chart);
- 2) report pages that include information for all procedure groups on one page (in current version of the report system these files include tables only).

report\_index\_file\_1.html through report\_index\_file\_N.html are index files for reports that require separate page for each procedure group (first type of reports). These index files do not include any reports, they just provide access to report pages. For example, "ind\_index.html" files (see Fig. 4) contain links to pages were you can get the charts and tables with data for the "General Indicators" reports.

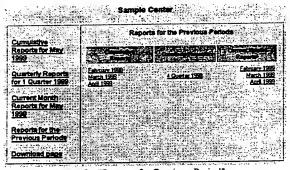


Fig. 3. Main page for "Reports for Previous Period".

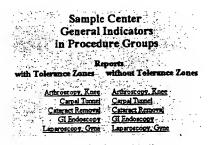


Fig. 4. Index file for General Indicators

At this moment the full list of index files is the following:

Age\_Distribution\_index.html
 anest\_index.html
 ind\_index.html
 payor index.html
 Index file for "Age Distribution" reports;
 Index file for "Complication by Anesthesia" reports;
 Index file for "General Indicators" reports;
 Index file for "Complications by Payor" reports;

5. recovtime\_ind\_tml
6. surgtime\_index.ntml

Index file for "Recov Time" reports; Index file for "Surgery Time" reports.

combo\_report\_file\_1.html through combo\_report\_file\_H.html are report files for reports where data for all procedure groups are combined in one file. At this moment these files contain tables only and the list of such files is the following:

1. Executive\_Table.html

"The Executive Benchmark Table" report tables;

2. DataTable.html

"Data Tables" report tables.

[Month], [Quarter] and [MonthCumul] folders contain a special file with the name in the MM-DD-YYYY format. The name of the file is the end date of the reports in the given folder. This file is used by the report system to determine the period of reports. Sub-folders in [OLD] folder do not have this file, because the period of reports can be easily determined using folder's name.

[Proc\_1], [Proc\_2],..., [Proc\_k],..., [Proc\_Z] folders represent different procedure groups for reports of the first type (separate pages for each procedure group). The names of these folders are derived from the names of corresponding procedure group by skipping all not alphanumeric characters, leaving "\_" and "-" symbols in unchanged form and changing all spaces to "\_" (Example: the folder for procedure group "D&C/Hysteroscopy" is "DCHysteroscopy", "ENT - T&A < 12" is "ENT - TA\_12"). Each report in these folders is represented by two files: report\_file\_k.html and report\_file\_k.gif. The HTML file includes a table and a chart in GIF format (Example: "Age Distribution" for procedure group " Carpal Tunnel" is represented by the files "Age\_Distribution2.html" and "Age\_Distribution2.gif" in the folder "CarpalTunnel").

[group\_1],..., [group\_k],..., [group\_T] are corporate group folders. They have the same structure as [centers] folder. The name of a corporate group folder is the three-letter USERCODE of the group. For the convenience, currently, corporate group usercodes begin with "ZAA", but there is no special limitations so any letters can be used.

#### The structure of the report system

The previous chapter of the documentation described the reports themselves. In this chapter the report system and its relationships with report files will be described.

```
[SOIX_REPORT_SYSTEM]
   -[Data]
    +---[archive]
            yyyymmdd.zip
    \--- [backup]
         \--- (yyyymmdd)
             +--- [AAA]
                     MEDUP. DBF
                      PATUP.DBF
             \---[XYZ]
                     MEDUP. DBF
                      PATUP.DBF
        Info.txt
        report.ini
   - [Log]
        Executive_Table.log
        Comparison_table.log
        DataTable.log
Data_calculator.log
        Executive Table Paper Reports.log GrabFile.log
        ProcDistrib.log
        report.log
+---[LST]
        Comparison table.1st
        Corporate_Members.lst
        DataTable Items.lst
        Executive_Table.lst Indicators.lst
        LogMessages.lst
        ProcConv.lst
        ProcDistrib.lst
        Stagel.lst
        Stage2.1st
    \---[Templates]
            Sample-Sites.1st
            Full_List_Sites.lst
  --[Programs]
+---[Paper_Reports]
            Executive_Table_Paper_Reports.exe
            Comparison_table.exe
    \---[Web_Reports]
APPENDER.mdb
            Chart_Generator.exe
            Executive_Table.exe
DataTable Creator.exe
            Data_Calculator.exe
            ProcDistrib_Creator.exe
   -[Template]
        Age_Distribution2.html
        Anest.html
        Anest2.html
        ind.html
        ind2.html
        index-Old.html
        loopback.html
        main-Old.html
        main-Template.html
        main.html
        Payor.html
        Pavor2.html
        SurgTime2.html
            index-Old.html
            main-Old.html
            main-Template.html
            main.html
       - [Img]
         \---[centers]
                AAA.jpg
                 XYZ.gif
       -- [NewCenterTemplateFolder]
        +--- [Download]
        +---[Month]
         +---[MonthCumul]
        +---[Quarter]
            index.html
```

Caution: This tree structure can be easily customized. To simplify the manual, the current tree structure is used, so if you have customized some of the paths then replace the default paths used in the documentation with your own.

main-Old.html

Soix.mdb

This is the main database for SOIX report system. There are two tables inside this file: MEDREC and PATINT2. MEDREC contain all medical records and PATINT2 – all patient interview records. This file is used by Data\_Calculator module only (see the description of this module later).

#### [Archive] folder and [Backup] folder

These folders are not used anymore. They were used to store incremental files produced by OMS 2.0.

#### [INI] folder

This folder contains the configuration files. These configuration files are designated for an end user and they allow to define "what reports will be generated". You cannot modify the layouts or mathematical expressions that are used by the report system — "how reports will be generated". These files should be modified every time when new reports are generated. The current version of the SOIX reports system supports one file only.

Caution: The current version of the report system does not have checks of correctness of the parameters in the configuration files, so be very careful when you modify these files. In most cases, you will get a runtime error if there is a typo in the configuration files, but in some cases, if the typo is not a trivial one, the reports will be generated without any error messages but the results will be not the correct ones. Currently, TAB character is not supported, so use spaces to tabulate the configuration files.

#### Report.ini

This file is used to define the periods to generate reports for. The format of the file is the following:

Name of Parameter=Value.

Comments can be used also. To use comments type a ";" character in the beginning of the comment line. Everything after the ";" character will be ignored by the report system. Almost all modules of SOIX report system use this file. In the APPENDIX, you can see the current version of Report.ini file.

Let's consider all parameters in more details.

Name of field	Allowed values	Description
CalculationDate	mm/dd/yyyy	The report system works in the following way: by default, it determines the current periods for Quarterly and Monthly reports using the current system date. For example, when you run the report system on 9/30. The as the "current month" for reports, it uses the 8th month (August) and as the "current quarter" it uses the 3rd quarter (from June to August). SOIX generates reports on the 15th day of each month and this does not create any problems, but if one of the centers requests to generate reports before the 15th day but after the 1st day of a month then in this case, by default, the report system will use the previous month as the "current month". And this is not what we want because it is too early to generate the new reports (there is no patient interview records for most medical records) — we just want to recalculate the existing reports. So, to solve this problem, this parameter was introduced. If this parameter has empty value then SOIX report system

MinNumberOfCases	Integer	uses the system date as the "cut ate", if it is not empty then it uses a value of this parameter. Also use parameter is required to generate sample reports. There is a special version of "soix.mdb" file for sample reports. All records in this database are dated before June so if the system date is used as the datum then only reports for previous periods can be generated, but if you make the CalculationDate equal to any day in June then May is treated as the "current month".  Only procedures that have "MinNumberOfCases" or more cases are shown in the "The Executive Benchmark Table" and in the paper
		reports.
Confidence	Real	This is a coefficient before standard deviation to calculate tolerable limits.
FoundationDate	mm/dd/yyyy	This date is used as the beginning date for the cumulative reports.
QuarterlyReports	Yes, No	Generate quarterly reports?
QuarterStart	1,2,3,4	Beginning quarter for quarterly reports
QuarterYearStart	уууу	Beginning year for quarterly reports
QuarterEnd	1,2,3,4	End quarter for quarterly reports
QuarterYearEnd	уууу	End year for quarterly reports
MonthlyReports	Yes, No	Generate "current month reports"?
MonthStart	1-12	Beginning month for "current month reports"
MonthYearStart	уууу	Beginning year for "current month reports"
MonthEnd	1-12	End month for "current month reports"
MonthYearEnd	уууу	End year for "current month reports"
CumulativeMonthlyReports	Yes, No	Generate "cumulative reports"?
CumulativeMonthStart	1-12	Beginning month for "cumulative reports"
CumulativeYearStart	уууу	Beginning year for "cumulative reports"
CumulativeMonthEnd	1-12	End month for "cumulative reports"
CumulativeYearEnd	уууу	End year for "cumulative reports"
RunMode		Currently this parameter is not used.
CleanedDBF	<u> </u>	Currently this parameter is not used.
StandardReport	Yes, No	Currently this parameter is not used.
StartDate	mm/dd/yyyy	Currently this parameter is not used.
EndDate	mm/dd/yyyy	Currently this parameter is not used.

#### Other configuration files

Currently there is one more configuration file. Its name is "new-soix.ini" and it is located in the Windows main directory (this directory can be determined using %WINDIR% environment-variable). This file is used by all modules as the main purpose of this file is to provide paths to the different components of the report system.

new-soix.ini

The format of the file is the following:

Name\_of\_Parameter=Value

Here is the list of all parameters in this file:

Name of field	Allowed values	Description
	Shared parame	ters that are used by all modules.
INIPath	A path to a directory.	A path to the folder where INI config files are located.
LogPath	A path to a directory.	A path to the folder where LOG files will be created.
MDBFile	Full path to a file	Full path to the report master database.
LSTPath	A path to a directory.	A path to the folder where LST files are located.
OMS2ArchiveDirectory	A path to a directory.	This parameter was used when OMS 2.0 was used as a front end, so now the parameter is not used.
OMS2BackupDirectory	A path to a directory.	This parameter was used when OMS 2.0 was used as a front end, so now the parameter is not used.

	,	
TemplateDirectory	A path to a directory.	A path to the folder where LL template files are located.
UploadDirectory	A path to a directory.	A path to the folder where centers upload incremental files.
InternetDirectory	A path to a directory.	A path to the folder where centers reports are located.
Par	ameter used	by the paper report modules only
NewReportsInternetDirectory	A path to a directory	A path to the folder where new reports will be generated.  This parameter was introduced as the report generation process takes a lot of time and there is a probability that centers may access their reports during this process. In this situation centers will not be able access their reports at least, but at the same moment there is a probability that these actions may interrupt the report generation process.
SavePathForPaperReport	A path to a directory	This parameter points to the path where paper report will be generated.
Target	"Web" or "Folder"	This parameter defines the way in which the paper report will be generated. When it is equal to "Folder" than these reports are placed in the separate folder defined by "SavePathForPaperReport" parameter. If this parameter is equal to "Web" than the paper report files will be placed in the centers folders like the modules that generate web-reports do. This option allows to make these reports available for the access trough the Internet.
Para	meters used l	oy "New_Center_Prepare" module
NTSecDirectory	Name of folder	This parameter defines a name of the folder where programs from the NTSEC pack are located. These programs are used to set up Windows NT permissions for the centers' upload folders.
ApacheUsersFile	Full path to a file.	This parameter defines a full path to apache users file that will created from scratch by the "New Center Prepare" module.
ApacheUsersFile	Full path to a file.	This parameter defines a full path to Apache users file that will created from scratch by the "New_Center_Prepare" module. This file is used to restrict an access to member sites.
ApacheGroupsFile	Full path to a file.	This parameter defines a full path to an Apache groups file that is used to restrict an access to member sites.
NewCenterTemplateFolder	A path to a folder	This parameter points to a directory where template files are stored.  These files are used to create sites for new centers.
PrepareUploadStuff	"Yes" or "No"	Prepare "upload" folder for a new center?
PrepareDownloadStuff	"Yes" or "No"	Prepare "download" folder for a new center?
PrepareHTMLFiles	"Yes" or "No"	Prepare index HTML files for a new center?

#### [Log] folder

This folder is used to store log files that are generated by different modules of SOIX report system.

Executive\_Table.log

This file is generated by Executive\_Table module of the report system.

Executive\_Table\_Paper\_Reports.log

This file is generated by Executive\_Table\_Paper\_Reports module of the report system.

DataTable.log

This file is generated by DataTable module of the report system.

Data\_Calculator.log

This file is generated by Data\_Calculator module of the report system.





This file is generated by GrabFile module of the report system.

ProcDistrib.log

This file is generated by ProcDistrib module of the report system.

report.log

This file is generated by report module of the report system.

Comparison Table.log

This file is generated by Comparison Table module of the report system.

#### [LST] folder

This folder contains configuration files like the [INI] folder does. But unlike the [INI] folder, almost all of these files are responsible either for mathematical calculations or for the layout of the reports. So these files should be modified very rarely (Exception is Sites.lst file) only when some changes in the reports themselves are made. Most of these files are a list of strings that have the same structure. Usually each string consists of several fields and the fields are separated by "\*" character.

Caution: The current version of the report system does not have checks of correctness of the parameters in the configuration files, so be very careful when you modify these files. In most cases you will get a runtime error if there is a typo in the configuration files, but in some cases, if the typo is not a trivial one, reports will be generated without any error messages but the results will be not correct ones. Currently, TAB character is not supported, so use spaces to tabulate the configuration files.

Executive\_Table.lst

Executive\_Table.lst is used by Executive\_Table module. This file contains a list of indicators that will be shown in "The Executive Benchmark Table". The format of each string is the following:

Indicator\_Name\*Numerator\*Denominator\*Description\*MinOrMax\*Link

Name of field	Allowable value	Description
Indicator_Name	The same restrictions as whose for field name in MS Access	This is a name of the indicator, this name is used for internal purposes of "Executive_Table" module and as a link to the HTML file that describes the indicator. In Fig. 5, the label number 2 shows the place where this text is used. Some HTML tags may be used (Example: - (i>, <font>), as this text is inserted directly in html files without any parsing.</font>
Numerator	the name of a field from "*_dump.mdb" tables	This field is used as the numerator to calculate an indicator.  Expression that is used to calculate indicators is the following:  Indicator = Numerator/Denominator*100%
Denominator	the name of a field from "*_dump.mdb" tables	This field is used as the denominator to calculate an indicator.  Expression that is used to calculate indicators is the following:  Indicator = Numerator/Denominator*100%
Description	any text string	Description of the indicator. In Fig. 5, the label number 1 shows the place where this text is used. Some HTML tags may be used (Example:  (Example:  i>, <io>, <font>), as this text is inserted directly into html files without any parsing.</font></io>

MinOrMax	', "Max"	Use "Min" for indicators that sold be minimized and "Max" for indicators that should be maximized.
Link	a path to a html file	A path to the html file that describes this indicator. (Example: "/genrep/ind1.html")

In the APPENDIX you can see the current version of Executive\_Table.lst file.

#### Sample Center

### EXECUTIVE BENCHMARK TABLE: INDICATOR STATUS AND TRENDS Quarter 1, 1999 to Quarter 4, 1998

Table was created on 06/30/1999

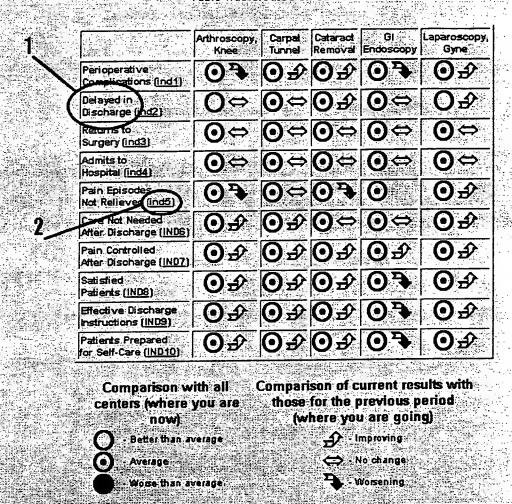


Fig. 5. Example of "The Executive Benchmark Table" table.

DataTableItems.lst

DataTableItems.lst is used by DataTable\_Creator module only.
DataTable\_Creator module generates "Data Tables" file ("DataTable.html").
DataTableItems.lst consist of several sections. Each section corresponds to a separate table in "DataTable.html" file. Strings that are located inside each section are used to customize the rows in tables. Each section begins with the following string:

---Name\_of\_Table\*Total\_by\_Proc\_Flag

		Description
Name of field	Allowable value	Description
TVAILE OF FIGURE		

Name_of_Table	Any text	Name of a table. In Figure the label number 1 shows the place where this text is used. Some HTML tags may be used (Example: br>, <i>, <font>), as this text is inserted directly into an HTML file without any parsing.</font></i>
Total_by_Proc_Flag	"TotByProc", ""	If this field equals to "TotByProc" then the last row "Total by Procedure" is calculated for this table, if this field is empty then this last row is not calculated. See Fig 6 labels 2.

Strings, following each section header, describe rows in the table. The format of these strings is the following:

Name\_from\_Dump\_DB\*Row\_Name

Name of field	Allowable value	Description
Name_from_Dump_DB	the name of a field from "*_dump.mdb" tables	Module DataTable_Creator takes the value of Name_from_Dump_DB field in "*_dump.mdb" table and puts this value into the table without any modifications and calculations.
Row_Name	Any text	Name of a row. On Fig. 6 label number 3 shows the place where this text is used. Some HTML tags may be used (Example: 'ci>, <io, <font="">), as this text is inserted directly into an HTML file without any parsing.</io,>

		ANE	STHES	A		٠
1				er (SMP		•
	of Proce				The state of the s	.2 
	(Table v	vas cre	ated on I	06/30/1999	<b>)</b>	٠
	Arthroscopy, Knee	Carpai Tunnei	Cataract Removal	GI Endoscopy	Laparoscopy, Gyne	To
General	139	3	0.	0-	34	17
Spinal	A 11	0	0	0.	0	1
IV/Local-MAC	0	8	63	91	0	18
Local	° 0	5	141	0	2. <b>0</b>	6
Other	0	33	.0	0	0	3
Total by Procedure	150	49	64	91	34	3
	. San Than Thair			Calife to a forter		
1 1	Same					: :
2				CATION		
2	Site: S	amp	le Cent	er (SMP		
	Site: S of Proce	amp dure:	le Cent 01/01/	er (SMP	) 3/31/1999	
	Site: S of Proce (Table w	Samp dure: vas cre	le Cent 01/01/ ated on I	ter (SMP 1 <b>999 - 0</b> 3 06/30/1999	) 3/31/1999 )	
	Site: S of Proce	Samp dure: vas cre	le Cent 01/01/ ated on l	ter (SMP 1 <b>999 - 0</b> 3 06/30/1999	) 3/31/1999 )    Laparoscopy,	To
	Site: S of Proce (Table v  Arthroscopy, Knee	Samp dure: vas cre	le Cent 01/01/ ated on l	ter (SMP 1999 - 03 06/30/1999	) 3/31/1999 )    Laparoscopy,	┢
Date	Site: S of Proce (Table v  Arthroscopy, Knee	carpal	le Cent 01/01/ ated on l	GI Endoscopy	S/31/1999 S/31/1999 Caparoscopy, Gyne	3
Date  No Pain, No Complications	Site: S of Proce (Table w Athroscopy, Knee	Carpal Tunned	Cataract Removal	er (SMP 1999 - 03 06/30/1999 GI Endoscopy	Laparoscopy, Gyne	3
Date No Pain, No Complications Pain:	Site: S of Proce (Table v  Arthroscopy, Knee 123	Carpal Tunnel	Cataract Removal	er (SMP 1999 - 03 06/30/1999 GI Endoscopy	Laparoscopy, Gyne 10	3
No Pain, No Complications Pain:	Site: S of Proce (Table v  Arthroscopy, Knee 123 17	Carpal Tunnel	Cataract Removal	er (SMP 1999 - 03 06/30/1999 GI Endoscopy	(Laparoscopy, Gyne 10 23	3 4 1

Fig. 6. Example of "Data Tables" file

#### Indicators.1st

Indicators.lst is used by Chart\_Generator module only. Indicators.lst consist of several sections. Each section corresponds to a separate report (the current version of Chart\_Generator module generates the following reports: "Age Distribution", "Recovery Time", "Surgery Time", "General Indicators", "Complications by Payor", "Complication by Anesthesia"). Each section begins with the following string:

---With\_Tolerance\*Without\_Tolerance\*Chart\_Header\*Chart\_Footer

Name of field	Allowable value	Description

With_Tolerance	ame of a HTML file without extension or nothing	The HTML file must be in the [SOIX_Report_Sytem] \ [Template] folder. If this field is empty then the version with tolerance limits of this report is not generated. In the section where folder [SOIX_Report_Sytem] \ [Template] is described you can find more information about internal structure of template files. (Example: for "General Indicators" reports with tolerance zone the template file is "ind.html", so With_Tolerance field equal "ind".
Without_Tolerance	the name of a HTML file without extension or nothing	The HTML file must be in the [SOIX_Report_Sytem] \ [Template]. If this field is empty then the version with tolerance limits of this report is not generated. In the section where folder [SOIX_Report_Sytem] \ [Template] is described you can find more information about internal structure of template files. (Example: for "General Indicators" reports without tolerance zone the template file is "ind2.html", so With_Tolerance field equal "ind2".
Chart_Header	Any text	This text is used as a header in the report chart. See Fig. 7, label 1. To insert "Enter" in this string use "  " (double vertical bar). Also values of the fields from "*_dump.mdb" tables and values of all indicators calculated inside Chart_Generator module can be used. To use them, use the following format: %Name_Of_FieldThisSite% for current center and %Name_Of_FieldAllSites% for all centers (Example: Total Medical Records field has the name TotMR, so placeholders for it will be %TotMRThisSite% and %TotMRAllSites%). In each section of Indicators.lst file, a user assigns names for each indicator that is calculated by Chart_Generator module — although these names and values of indicators are not saved anywhere, you can still use them in Chart_Header field (Example: In section "General Indicators" indicator with name "ind1" is defined, so you can use placeholders %ind1AllSites% and %ind1ThisSite%.)
Chart_Footer	Any text	This text is used as a footer in the report chart. See Fig. 7, label 2. All instruction for Chart_Header field can be used for this field.

Indicators for each section are described after the section header. The format of indicator description string is the following:

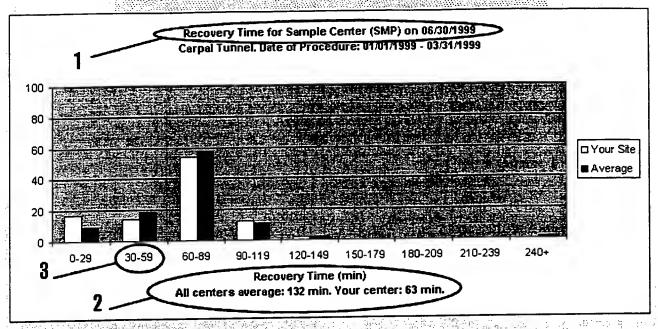
 ${\tt Indicator\_Name*Numerator*Denominator*AxesLabels}$ 

Name of field	Allowable value	Description
Indicator_Name	The same restrictions as whose for field name in MS Access	Used for internal calculations only. Make sure that there is no any field in "*_dump.mdb" files with the same name.
Numerator	the name of a field from "*_dump.mdb" tables	This field is used as the numerator to calculate the indicator. The expression that is used to calculate indicators is the following:  Indicator = Numerator/Denominator*100%
Denominator	the name of a field from "*_dump.mdb" tables	This field is used as the denominator to calculate the indicator. The expression that is used to calculate indicators is the following:  Indicator = Numerator/Denominator*100%
AxesLabels	Any text	This text is used in charts as label of the indicator. To put "*" character use double caret characters ("^\"). See Fig. 7 label 3.

#### **Recovery Time**

The diagram below shows the *level* of the indicator schieved in YOUR CENTER as a uside white bear.

The AVERAGE level at all the paracipating centers is shown as a blue bear.



				0-29	30-59	60-89	90-119 1	20-149	150-179	180-209	210-239	240+
												<u>.</u>
	l Sites: Ratio			8.9			A	71 1 1 1 1 1 1 1 1 1 1	0.0	0.0		1.2
	Cases for G Total Case			44	94	287	54	10	0	0	0	. <b>.</b>
	our Site: Ratio Cases for G	ives Ra	0.00	1.0	14.8 7		12.5 6	2.1 1	0.0 0	0.0	0.0 0	0.0
A	Total Case									. de de la		

Fig. 7. A sample of report page.

LogMessages.lst

Almost all report system modules use this file. This file defines different log messages. The format of each string is the following:

Message\_Name=Text\_of\_Message

where Message\_Name is a name of message (report system modules use this name to refer to log messages) and Text\_of\_Message is a text of message. Usually a message text is much longer then Message\_Name, so the main purpose of LogMessages.lst file is to eliminate extra text and also this lst file allows to attain the similarity of log messages throughout all modules. See the current version of this file in the APPENDIX.

Comparison\_table.lst

This file is used by Comparison\_table module. It is divided into several sections. Each section begins with a header and represents a separate group of indicators in "Comparison Table" (paper reports). The format of the header is:

where Header\_of\_indicator\_group contains a text that will be used as a header of indicator group (See Fig 8, label 1). If Header\_of\_indicator\_group is empty then no header is used and all indicators in this group have a bold font (see Fig. 8, label 3).

Each section is followed by indicator definitions. The format of these definitions is the following:

Numerator\*Denominator\*Descipting\_Text\*

Name of field	Allowable value	Description
Numerator	the name of a field from "*_dump.mdb" tables	This field is used as a denominator to calculate the indicator. The expression that is used to calculate indicators is the following:  Indicator = Numerator/Denominator*100%
Denominator	the name of a field from "*_dump.mdb" tables	This field is used as the denominator to calculate the indicator. The expression that is used to calculate indicators is the following:  Indicator = Numerator/Denominator*100%. If  Denominator is empty then Numerator is used only and the expression becomes as Indicator=Numerator
Descipting_Text	Any text	Name of a row. In Fig. 8, the label number 2 shows the place where this text is used. Some HTML tags may be used (Example: - <li><li><li><li><li><li><li><li><li><li></li></li></li></li></li></li></li></li></li></li>

Corporate\_Members.lst

Almost all modules use this file. This file describes corporate members. Each corporate member is represented by a separate section. All sections have a header. The format of headers is:

---GroupName\*GroupUsername\*GroupUserCode\*members\_access

where GroupName is a name of the group; GroupUsername is a username of the group (this username is used to access reports); GroupUserCode is a three-letter usercode of the group; members\_access ("Yes" or "No") is used to restrict the access of separate members to the reports. members\_access is used by "New\_Center\_Prepare" module to customize Apache ".htaccess" files. If members\_access="Yes" than the separate members of the group can access their reports otherwise only GroupUsername can be used to access the reports.

The header of the section is followed by a list of usercodes of centers that belong to the group. The usercodes are separated by "Enter" key.

Y	OUR PF	ROCE	OURE	GROU	JPS				/	
3 2 1		oscopy, nee		GI SCOPY		aract noval		rpal nnel		oscopy, vne
	Your	All	Your	All Centers	Your	All	Your	All	Your	All
Number of Patients	150	1269	91	1372	64	856	49	505	34	388
Time (Minutes)										
Time For Procedure	37	46	176	124	27	26	16	52	31	99
Time For Recovery	98	184	657	454	29	30	63	132	111	362
Time For Patient Intention	4	4	3	3	2	2	4	4	3	3
Problems Before Leaving Surgery Center	>	-					•			
Percent Normal Discharge	100.0	99.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Percent without Problems	82.0	84.9	95.6	97.1	96.9	96.6	91.8	95.0	29.4	36.6
Percent with Post Operative Pain		61.2	2.2	1.5	4.7	5.3	18.4	14.9	67.6	60.1
Percent Medications Ordered		100.0	50.0	50.0	100.0	100.0	100.0	100.0	100.0	100.0
Percent Pain Relieved	96.3	97.7	50.0	50.0	66.7	71.1	100.0	96.0	100.0	100.0
Percent Pain Prescription Given	99.3	99.0	2.2	1.5	3.1	3.0	100.0	97.6	91.2	90.7

Fig. 8. An example of "Comparison Table" that is used in "Paper Reports".

#### ProcConv.lst

This file is used by Appender and Data\_Calculator. This file defines a mapping table between the CPT codes and the procedure groups. When Appender module appends new data it ignores the "PROC" fields in incremental files and uses this mapping, in the same way Data\_Calculator ignores the existing "PROC" field in the report master database and recreates this field using the mapping. All strings in ProcConv.lst file have the same format:

where CPT\_Code is a five digit CPT code and Procedure\_Group is the name of the corresponding procedure group. See the current version of ProcConv.lst file in the APPENDIX.

#### ProcDistrib.lst

ProcDistrib.lst file is used by ProcDistrib module. It defines what fields from "\*\_dump.mdb" databases should be displayed in the "Case Distribution" table. The format of the file is the following:

Field\_Name\*Descripting\_Text\*

Name of field	Allowable value	Description
Field_Name	the name of a field from "*_dump.mdb" tables	Use only fields that contain absolute number of cases. In current version of the report system almost all fields satisfy this restriction – only the fields with average times do not satisfy.
Descipting_Text	Any text	Name of the column. In Fig. 9, the label number 1 shows the place where this text is used. Some HTML tags may be used (Example: - (i>, <font>), as this text is inserted directly into an HTML file without any parsing.</font>

## Case Distribution Date of Procedure: 03/01/1999 - 10/31/1999 Table was created on 11/16/1999

Procedure Name	Center	Medical Records	Patient Interview
Arthroscopic	QCA:	2	2
ACL Repair (1 center)	Total	2	2.
	AAM	10	10
Breast	AAS	19	15 <sub>0</sub>
augmentation (3 centers)	RSA	1.	erre len
	Total	30 %	. <b>26</b>
	AAD	47	47
	AAE	14	14
	AAL	8	8
	AAS	-10	<b>5</b> ,

Rhinoplasty (2 centers)	178 500	<b>b.</b> • • • •	
	Total	10	9
	AAE		Evit.
	AAM	. 3	<b>3</b>
Rhytidectomy (4 centers)	AAS	1.1	<b>F.M.</b>
	RSA	3-2 <b>1</b> 32 2	3 to 14 1/2
	Total	6	6
Grand Total	rk.	4,999	4,581

Fig. 9. An example of "Case Distribution" table

Current version of the file contains the two strings only:

TotMR\*Medical Records\*
TotPI\*Patient Interview\*

but this list can be easily expanded as a need in new columns arises. Currently, "Case Distribution" table is accessible to the SOIX staff only and is used to get a more complete picture of the current state of the report master database.

Sites.lst

Almost all modules of the report system use this file. It contains information about centers – it describes relationship between usercodes, real names and usernames. The format of this file is:

Three\_Letter\_USERCODE\*real\_Name\_of\_center\*Centers\_Username

where Three\_Letter\_USERCODE is the usercode of the center; real\_Name\_of\_center is the real name of the center and Centers\_Username is the username. Note that string

ALL\*All centers\*

MUST be first. This string defines usercode for all centers.

Stage1.lst

This file is used by Da Calculator module only. It describes the mathematical expressions using the MS SQL language. To get a table that contains procedure level data for a certain period, Data\_Calculator module runs in two stages. On the first stage, the module uses Stagel.lst file to create a "SELECT"-query that combines MEDREC and PATINT2 tables in one table. Instead of the original fields, this table contains new calculated fields that are used to calculate fields in "\*\_dump.mdb" files on the next stage. On this stage, the records are not grouped by procedure groups and centers usercodes – they are still patient-level ones.

The format of strings of this file is the following:

Name\_of\_Field\_1\*SQL\_Expression

Name of field	Allowable value	Description
Name_of_Field_1	The same restrictions as whose for field name in MS Access	When you select a name for this field, make sure that this field must be unique among fields in MEDREC table, PATINT2 table and fields defined in Stage1.1st and Stage2.1st files.
SQL_Expression	Expression in MS SQL language	Use help files for MS Access or Visual Basic to get additional information about MS SQL language. In SQL_Expression field, you can use Name_of_Field_1 fields from other strings of Stage1.1st file, but be careful and do not create an unsolvable situation when in the current string you use another field, but the SQL_Expression for that field uses Name_of_Field_1 for the current string. This is so called "Circular reference".

A simplified version of "SELECT"-query used on the first stage may be written in the following way:

SELECT expression\_1 AS field\_1,...,expression\_k AS field\_k,...,expression\_N AS field\_N FROM table

Name\_of\_Field is used as field\_k and SQL\_Expression is used as expression\_k.

Stage2.1st

This file is used by Data\_Calculator module only. It describes mathematical expressions using MS SQL language. This file is used on second stage of the calculation of MasterTable (later, records from Mastertable are used to populate "\*\_dump.mdb" files). On this stage MasterTable is finally calculated. It contains procedure-level data. Only this procedure-level data is used by other modules on next steps of report generation process.

The format of strings of this file is the following:

Name\_of\_Field\_2\*Data\_Type\_of\_Field\*SQL\_Expression\*Denominator\*

Name of field	Allowable value	Description		
Name_of_Field_2	The same restrictions as whose for field name in MS Access	When you select a name for this field, make sure that this field must be unique among fields in MEDREC table, PATINT2 table and fields defined in Stage1.1st and Stage2.1st files.		
Data_Type_of_Field	Text, Long, Single	Defines a type of the field. Currently three data types are supported but this list can be easily expanded.		

SQL_Expression	pression in MS SQL language	Use help files for MS A solutions or Visual Basic to get additional information about MS SQL language. Inside the SQL_Expression you can use Name_of_Field field from other strings of Stagel.lst file, but be careful and do not create an unsolvable situation when in current string you use another field, but SQL_Expression for that field uses Name_of_Field of current string.
Denominator	Any item from the Name_of_Field_2 list	Most of the fields from Name_of_Field_2 list are absolute numbers of cases, so to get a value for the whole industry, values for different centers must be just summed up. Some of the fields like average times are not applicable to this rule, they contain relative values, so a simple addition cannot be used to calculate the whole industry values. In this case the following mathematical expression is used: $\sum_{k=1}^{N} \left(Ind_k \times Denom_k\right)$ $Ind_{All} = \sum_{k=1}^{N} \left(Ind_k \times Denom_k\right)$ where $Ind_{All}$ - value for the whole industry, $Ind_k$ - value for $k$ center, $Denom$ - denominator for the field. So Denominator defines a field that is the denominator for a given indicator. If Denominator is empty then an ordinary addition is used.

#### [Templates] folder

Files in this folder are not used by the report system. The purpose of the folder is to store ready-to-use configuration files for different types of reports. For example, you can use this folder to store configuration files used to generate sample reports. Currently, this folder contains two files only (Sample-Sites.lst and Full\_List\_Sites.lst) – they are two versions of Sites.lst file: one is for the usual reports, another for the sample reports.

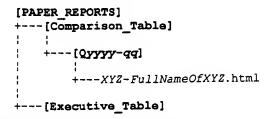
When the list of centers expands, you should modify Full\_List\_Sites.lst file first and then copy it to [LST] folder under Sites.lst name. In this case, there is no need to backup Sites.lst file when sample reports must be generated.

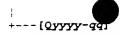
#### [Programs] folder

This folder contains all modules of the report system. Currently all modules may be divided into two groups: for "Paper Quarterly Reports" and for "Web Reports". [Paper\_Reports] and [Web\_Reports] folders were created according to this breakdown.

This folder contains modules that are used to generate reports for the "Paper Quarterly. Report". The HTML files generated by the paper reports modules are created in the folder defined by "SavePathForPaperReport" (currently it is "C:\SOIX\WebSites\SOIX\Paper\_Reports") parameter in the "new-soix.ini" file. The

current structure of the "Paper\_Reports" folder is:





Executive\_Table\_Paper\_Reports.exe

This module generates "Executive table" for the paper quarterly report. It creates HTML files for all quarters defined in report.ini file.

As input files, this module uses:

- 1. "report.ini" defines periods for which the reports are calculated;
- 2. "Executive\_Table.lst" defines indicators that will be used in "Executive table";
- 3. "sites.lst" defines a list of sites for which the reports are calculated;
- "LogMessages.lst" defines a list of log messages;
- 5. "\*\_dump.mdb" contain data for calculations.

#### Output files are:

- 1. "Executive\_Table\_Paper\_Reports.log" log file for this module;
- 2. HTML file with the names in the format "UserCode-CentersFullName.html" report files.

Currently the reports are generated for the top five procedure groups only. Constant "NumberOfProcedures" in the Executive\_Table\_Paper\_Reports module defines the number of these procedures.

Comparison\_table.exe

This module generates "Comparison table" for the paper quarterly report. It creates HTML files for all quarters defined in "report.ini" file.

As input files this module uses:

- 1. "report.ini" define periods for which the reports are calculated;
- 2. "Comparison\_table.lst" defines indicators that will be used in "Comparison table";
- 3. "sites.lst" define a list of sites for which the reports are calculated;
- 4. "LogMessages.lst" defines a list of log messages;
- 5. "\* dump.mdb" contain data for calculations.

#### Output files are:

- 1. "Comparison\_table.log" log file for this module;
- 2. HTML file with the names in the format "UserCode-CentersFullName.html" report files.

Currently the reports are generated for the top five procedure groups only.
"NumberOfProcedures" constant in the source code of Comparison\_table.exe module defines the number of procedures.

#### [Web\_Reports] folder

This folder contains modules of the report system that generate reports provided through the Internet.



This module appends incremental files into "Report Master Database" ("soix.mdb") file. It uses only one configuration file (new-soix.ini). This module scans all centers directories located under upload directory defined by parameter "UploadDirectory" ("new-soix.ini" file) and append incremental records from these folder to the master database (soix.mdb). Appended incremental files are moved to the centers "Backup" folder located under their upload directories.

Chart Generator.exe

This module generates the large part of reports. It creates the following reports:

- 1. Age Distribution,
- 2. Recovery Time,
- 3. Surgery Time,
- 4. General Indicators,
- 5. Complications by Payor,
- 6. Complication by Anesthesia.

As input files this module uses the following ones:

- 1. Corporate Members.lst
- 2. Indicators.lst
- 3. "\* dump.mdb" files
- 4. MasterTable.mdb
- 5. Sites.lst
- 6. LogMessages.lst
- 7. all HTML template files from folder, defined by "TemplateDirectory" parameter in "new-soix.ini" (currently it is [SOIX\_Report\_System]\[Template]).

As it was written in "The structure of report folders on the SOIX private web site", all reports may be divided into two types: the reports which contain data for all procedure groups in one page and whose that have separate page for each procedure group. Actually Chart\_Generator.exe module is the only one that generates reports represented in separate pages. As it was written before, report folders for all periods have special sub-folders for each procedure group (in Fig.1 these folders are shown as <code>[Proc\_1]</code>, <code>[Proc\_2]</code>, <code>[Proc\_k]</code> and <code>[Proc\_Z]</code>) and there are the index files (on Fig.1 these files are referred as <code>report\_index\_file\_1.html</code>, ...., <code>report\_index\_file\_M.html</code>) that contain links to this report pages. All these folders and files are generated by <code>Chart\_Generator.exe</code>. Also, this module refreshes main-Old.hmtl, main page of each center (index.html file that are located directly in the center's folder, not in sub-folders), and index.html files for all recalculated periods.

If centers sent their favorite pictures to place in their report title pages, to use them you should:

- 1. convert pictures to JPEG or GIF format;
- 2. name them using the format "USERCODE.(jpg or gif)" (For Example aaa.jpg, aba.gif).
- 3. put all these files in sub-folder "img\centers" of "SOIX\_Report\_System\Template" folder.

If a center that has a communication picture is included in "Sites.lst" the main page and main picture will be updated by Chart Generator.exe.

Chart\_Generator.exe module has a very important difference from other report modules. When other report modules are running they update only the report files that they generate – they do not delete any other report files, so there is no need to rerun other modules later. But when the Chart\_Generator.exe module is running, it deletes the whole report folder for a given period, so all other report generating modules should be rerun. Currently such behavior is pretty reasonable because Chart\_Generator.exe module takes more then 90% of time to create new reports.

Executive Table.exe

This module creates "The Executive Benchmark Table" tables for quarter reports. As input files it uses:

- 1. Sites.lst
- 2. Corporate Members.lst
- 3. Executive Table.lst
- 4. LogMessages.lst
- 5. "\* dump.mdb" files
- 6. report.ini
- 7. new-soix.ini

As output files, it creates "Executive\_Table.html" files for all quarters defined in "report.ini" file. This module can be easily modified to generate the reports for other periods, not for quarters only.

DataTable\_Creator.exe

This module generates "Pain, Complication & Patient Satisfaction" tables. Input files:

- 1. DataTableItems.lst
- 2. Corporate Members.lst
- 3. Sites.lst
- 4. "\* dump.mdb" files
- 5. report.ini
- 6. new-soix.ini

#### Output files:

- 1. DataTable.log
- 2. DataTable.html files for each report period defined in "report.ini"

Data Calculator.exe

This module calculates procedure-level data for all centers. Only this module and "APPENDER" have direct access to the SOIX main database (soix.mdb file), all other modules just use procedure-level data. This allows to eliminate extra calculations, for example if the layout of several reports is changed then there is no need to recalculate the data, you just run the

necessary modules and the refresh the reports. In most cases it take much less time then when the data should be recalculated.

As input files this module uses:

- 1. soix.mdb
- 2. Corporate\_Members.lst
- 3. Stage1.lst
- 4. Stage2.lst
- 5. report.ini
- 6. new-soix.ini
- 7. sites.lst
- 8. LogMessages.lst
- 9. ProcDistrib.lst

#### And output of the module is:

- 1. all "\* dump.mdb" files;
- 2. "MasterTable.mdb" files in "centers\All\MasterTableArchive" folder.

Actually "MasterTable.mdb" files do not contain any new data they just duplicate data in "\*\_dump.mdb" files, but the data organized in a different way – the data for all centers for a given period are stored in one place. For some reports it allows to eliminate extra hard drive access.

ProcDistrib\_Creator.exe

This module creates "Case Distribution" tables. These tables are created for the whole network only. They show case distribution by procedure group and by site inside each procedure group. Currently the number of medical records and patient interviews are present on these tables, but this list can be easily expanded by editing ProcDistrib.lst file.

#### Input files:

- 1. new-soix.ini
- 2. report.ini
- 3. LogMessages.lst
- 4. ProcDistrib.lst

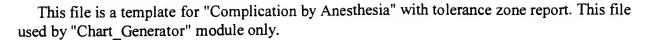
#### Output files:

- 1. ProcDistrib.log
- 2. ProcDistrib.html for all periods defined in report.ini file

#### [Template] folder

Age\_Distribution2.html

This file is a template for "Age Distribution" report. This file used by "Chart\_Generator" module only.



Anest2.html

This file is a template for "Complication by Anesthesia" without tolerance zone report. This file used by "Chart\_Generator" module only.

ind.html

This file is a template for "General Indicators" with tolerance zone report. This file used by "Chart Generator" module only.

ind2.html

This file is a template for "General Indicators" without tolerance zone report. This file used by "Chart\_Generator" module only.

index-Old.html

This file is used for "Reports for Previous Periods". Chart\_Generator.exe module creates index.html files for these reports. This file is used by Chart\_Generator module.

loopback.html

This file is shown instead of reports when a center does not have data for certain period. This file is used by Chart\_Generator, DataTable\_Creator and ProcDistrib\_Creator modules.

main-Old.html

This file is used as main page for reports for previous period. It contains links to these reports. You may see a sample of this file on Fig.3. This file is used by Chart\_Generator module.

main-Template.html

This file is used as main index page for "Current Month Reports", "Quarterly Reports" and "Cumulative reports". This file is used by Chart\_Generator module.

main.html

This file is used as center's main page. This page includes either default SOIX picture or a favorite picture of the center. This file is used by Chart\_Generator module.

Payor.html

This is a template for "Complications by Payor" reports with tolerance limits. This file is used by Chart Generator module.

Payor2.html

This is a template for "Complications by Payor" reports without tolerance limits. This file is used by Chart Generator module.

RecovTime2.html

This is a template for "Recovery Time" reports. This file is used by Chart\_Generator module.

SurgTime2.html

This is a template for "Surgery Time" reports. This file is used by Chart Generator module.

#### [All] folder

This folder contains files that are used for reports for the whole network. Currently there are four files in this folder:

- 1. index-Old.html
- 2. main-Old.html
- 3. main-Template.html
- 4. main.html

They have the same application as corresponding templates in the upper template folder.

#### [Img] folder

This folder stores various images that are used for reports. Currently it contains [centers] folder only. This folder is used to store centers' favorite pictures in the following format: "USERCODE.(jpg or gif)", where USERCODE is three-letter user code of a center (For example: aaa.jpg, aza.gif).

#### **How-To Section**

#### How to install the report system

- 1. Copy whole "Soix\_Report\_System" folder to the directory of you choice on the new computer;
- 2. Copy file "new-soix.ini" from "Soix\_Report\_System\ini" folder to your windows directory (this directory is defined by "WINDIR" environmental variable you can check the value of this variable using "set" command by running it in the MS-DOS prompt);
- 3. Customize the copy of file "new-soix.ini" located in the windows directory make sure that:
  - a. Parameters "INIPath", 'LogPath", "MDBFile", "LSTPath", "TemplateDirectory", "NewCenterTemplateFolder" corresponds to the new location of the "Soix\_Report\_System" folder;
  - b. Parameters "UploadDirectory", "InternetDirectory", "NewReportsInternetDirectory", "SavePathForPaperReport", "ApacheUsersFile", "ApacheGroupsFile" corresponds to the location of the web-server powered by Apache;
  - c. Parameter "NTSecDirectory" corresponds to the location of "NTSEC" pack of command line utilities for

There is no need to customize "OMS2ArchiveDirectory" and "OMS2BackupDirectory" parameters as they are not used anymore.

#### How to make backup copies of the report system

The general rule to determine when backup copies should be made is the following: the data that was changes should be backed up at the end of day when these modifications were made. All folders that should be backed up are located on the main server – they are: "C:\SOIX" and "C:\Admin\_Stuff". The destination folder for the backup copies is located on the developer workstation and this folder is "X:\SOIX\_Backups". This folder has sub-folders in the format "yyyy-mm-dd" where "yyyy" is a year, "mm" is a month and "dd" is a day. Each folder corresponds to a backup that was made on "mm/dd/yyyy" day.

If there is no information when the data was changes (so the general rule is not applicable) the following schedule can be used:

- 1. Folders that should be backed up every day centers upload folder ("C:\SOIX\WebSites\SOIX\upload") and the marketing databases ("C:\SOIX\Marketing DataBases" folder);
- 2. Whole "C:\soix" folder and "C:\Admin\_Stuff" folder should be backed up every one or two weeks.

To backup data the following steps should made:

- 1. Create a folder in the format "yyyy-mm-dd" in the "X:\SOIX\_Backups" folder on the developer workstation (for example if today's day is 07/21/matchan "100-07-21" folder should be created);
- 2. Pack all folders that should be backed up and put the archives into the just created backup destination folder (in our example it will be "X:\SOIX\_Backups\-07-21").

  ZIP, ARJ, RAR or any other packing format can be used but ZIP is more preferable as it is more commonly used format. For example if "C:\SOIX\WebSites\SOIX\upload" and "C:\SOIX\Marketing\_DataBases" folders should be backed up, finally you should get two archive files ("Marketing\_DataBases.zip" and "upload.zip") located in the "X:\SOIX\_Backups\-07-21" folder.
- 3. If the size of a complete backup (when whole "C:\soix" folder and "C:\Admin\_Stuff" folder are backed up) is not more than 650 Mbytes, this backup should be saved on a CDR disk. When the size is more than 650 Mbytes but less then 700 Mbytes when CDR disks can be used too, but in this case special 700 Mbytes (80 minutes) disks should be used.

#### How to generate reports

- 1. Copy the whole "centers" folder ("InternetDirectory" parameter) to the path defined by "NewReportsInternetDirectory" parameter (currently it is "C:\SOIX\WebSites\SOIX\NEW") in "new-soix.ini" file ("c:\winnt\new-soix.ini").
- 2. Run Appender module

  ("C:\SOIX\Soix\_Report\_System\Programs\Web\_Reports\APPENDER.mdb"). After it
  finished, all new records will be added to SOIX Report Master Database

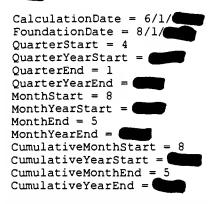
  ("C:\SOIX\Soix\_Report\_System\Data\soix.mdb") "MDBFile" parameter in the "new-soix.ini" file ("soix.mdb" file).
- 3. Modify "report.ini" ("C:\SOIX\Soix\_Report\_System\INI\report.ini") file to customize the periods and the type of reports to be generated.
- 4. Run "Data Calculator.exe". Wait when it finishes.
- 5. Run "Chart Generator.exe". Wait when it finishes.
- 6. Run "Executive\_Table.exe". Wait when it finishes.
- 7. Run "DataTable Creator.exe". Wait when it finishes.
- 8. Run "ProcDistrib Creator.exe". Wait when it finishes.
- 9. Backup current reports ("centers" folder) rename "centers" folder to "OLD".
- 10. Rename the folder defined by the parameter "NewReportsInternetDirectory" to the "centers" folder.
- 11. Now you can delete the "OLD" folder or you can use it to check the new reports by comparing the new reports with old ones.

#### How to generate reports not for all centers

- 1. Edit "sites.lst" file in the "lst" folder delete all center that do not need reports. DO NOT delete first string where "all" center is defined;
- 2. Execute all steps described in the "How to generate reports" paragraph;
- 3. Copy file Full\_List\_Sites.lst from "lst/template" folder over "sites.lst" file this step is required to be sure that reports for all centers will be generated in the future.

## How to generate sample reports

- 1. Copy "Soix-Sample.mdb" ("C:\SOIX\Report\_DataBases\Soix-Sample 12-16.mdb") as "Soix.mdb" ("C:\SOIX\Soix\_Report\_System\Data\soix.mdb")
- 2. Modify "NewReportsInternetDirectory" parameter in "new-soix.ini" file to be sure it points to the folder dedicated for sample reports.
- Modify "report.ini" file to customize the periods and the type of reports to be generated. Records of current version of "Soix-Sample.mdb" are dated between August and May so for sample reports parameters in "report.ini" files should be the following:



- 4. Copy "Sample-Sites.lst" to "Sites.lst
- 5. Run "Data Calculator.exe". Wait when it finishes.
- 6. Run "Chart Generator.exe". Wait when it finishes.
- 7. Run "Executive Table.exe"
- 8. Run "DataTable Creator.exe"
- 9. Run "ProcDistrib\_Creator.exe"
- 10. In "Soix-Sample.mdb", the sample center has USERCODE = "SMP" so sample reports will be created in SMP folder under folder defined by "NewReportsInternetDirectory" parameter in "new-soix.ini" file.
- 11. Copy the contents of SMP folder to the folder that is designated for the sample reports and is accessible through the SOIX public web-site.

#### How to add new center

- 1. Assign a username and a usercode to the center;
- 2. Add this information plus the full name of the center to the "Full\_List\_Sites.lst" file (currently it is "C:\SOIX\Soix\_Report\_System\LST\Templates\Full\_List\_Sites.lst");
- 3. Copy "Full\_List\_Sites.lst" to "Sites.lst" file ("C:\SOIX\Soix\_Report\_System\LST\sites.lst");
- 4. Run "New\_Center\_Prepare" program ("C:\SOIX\General\_Utils\New\_Center\_Prepare.exe");
- 5. Add a link to the home page of the center in one of the member homepages (C:\SOIX\WebSites\SOIX\genrep\rep1.shtml, rep2.shtml, rep3.shtml or rep4.shtml each file represents a set of states).

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## How to customize centers pictures

- 1. Convert the center's picture to GIF or JPG graphic format;
- 2. Rename this picture to "Usercode.(GIF or JPG)" (for example, aaz.gif, aba.jpg);
- Put the picture in the "Img\centers" subfolder of the folder defined by the parameter "TemplateDirectory" in the "new-soix.ini" file (currently it is "C:\SOIX\Soix\_Report\_System\Template\Img\centers");
- 4. Next time when new reports will be generated this change will take effect. To customize the centers picture before the next report generation the following steps should be done:
  - a) Make a copy of the picture in the center's directory;
  - b) Manually edit the center's main home page (index.html file) to change the link from the default picture (currently it is cherries) to their custom picture. Next time when new reports will be generated all these manual changes will be automatically overwritten, so there is no need to undo these manual changed later.

## How to modify the list of CPT codes and procedures

CPT codes and procedures that are supported by the SOIX report system are located in the "ProcConv.lst" file ("C:\SOIX\Soix\_Report\_System\LST\ProcConv.lst"). So this is the only file that should be modified when the list of CPT codes/procedures is modified.

Let us consider different situations:

- 1. Names of some of the procedures are changed just change these names in the "ProcConv.lst". No new strings are added in this case;
- 2. New CPT codes are added or existing CPT codes are merged (no existing codes were deleted) add new CPT codes in the file "ProcConv.lst". If some of the CPT codes were merged than do not delete original codes although they are not used by centers anymore just add new codes that were created after these merges. For example, there were codes 10001 and 10003 and after the merge new code 10005 were created. Codes 10001 and 10003 will not be used by centers anymore (10005 will be used instead) but you should keep these codes (10001 and 10003).
- 3. If some of the codes were eliminated completely (not merged) or SOIX stopped to support them just delete the strings where these codes are described.

## How to add a corporate member

- 1. Assign a username and a usercode to the corporate member;
- 2. Add this corporate member to the "Corporate\_Members.lst" file (see the description of this file in the "The structure of the report system" section, in the "Corporate\_Members.lst" subsection);
- 3. Run "New\_Center\_Prepare" program (currently it is C:\SOIX\General Utils\New Center Prepare.exe).

## **Appendix**

The Appendix section of this manual contains listings of configuration files used by SOIX report system. These listings are the last versions as August 1,

## Current version of report.ini file

```
;Everything that is located after ";" is comments
 [Run options]
CalculationDate =
                          ;1/30/ ;Date that will be used as creation date in
charts and tables
                                      ; If there is no date then current date is used
MinNumberOfCases =20
                                      ;Minimal number of cases that allows to generate
reports for the procedure group
Confidence
                  =1.7
                                      ;Coefficient before sigma to calculate tolerable
1imits
FoundationDate
                  =1/1/
QuarterlyReports =yes
                              ;Yes or No
QuarterStart
                  =1
                              ;1,2,3 \text{ or } 4
                              ; format is yyyy
QuarterYearStart =
QuarterEnd
                              ;1,2,3 \text{ or } 4
QuarterYearEnd
                              ; format is yyyy
MonthlyReports
                               ;Yes or No
MonthStart
                              ;1 to 12
                              ; format is yyyy
MonthYearStart
MonthEnd
                              ;1 to 12
MonthYearEnd
                              ; format is yyyy
CumulativeMonthlyReports =yes
CumulativeMonthStart
CumulativeYearStart
CumulativeMonthEnd
CumulativeYearEnd
;----parameters below this line are not supportes at this moment
RunMode
                              ;Auto or Manual
                 =Auto
CleanedDBF
                 =no
                              ; Yes or No
StandardReport
                              ;Yes or No
                 =no
                 =1/1/
StartDate
EndDate
                 =12/31/
```

## Current version of Executive\_Table.lst file

ind1\*Nummer1\*TotMR\*Perioperative Compli-<br/>
compli-<br/>
ind2\*Nummer2\*TotMR\*Delayed in Discharge\*min\*/genrep/ind2.htm ind3\*Nummer3\*TotMR\*Returns to Surgery\*min\*/genrep/ind3.htm ind4\*Nummer4\*TotMR\*Admits to Hospital\*min\*/genrep/ind4.htm ind5\*Nummer5\*Denom5\*Pain Episodes Not Relieved<br/>
br>\*min\*/genrep/ind5.htm

IND6\*Nummer6\*TotPI\*Care Not Needed After<br/>
IND7\*Nummer7\*Denom7\*Pain Controlled After<br/>
IND8\*Nummer8\*TotPI\*Satisfied Patients\*max\*/genrep/ind8.htm<br/>
IND9\*Nummer9\*TotPI\*Effective Discharge <br/>
IND10\*Nummer10\*TotPI\*Patients Prepared for <br/>
IND10\*Nummer10\*TotPI\*Patients P

## Current version of DataTableItems.lst file

```
---PATIENT DISPOSITION*TotByProc
  Patient Dispos Normal*Normal
  Patient_Dispos_RetainedMore3Hrs*Retained >3 hrs
  Patient_Dispos_Hospital*Hospital
  Patient_Dispos_Reoperated*Reoperated
  ---ANESTHESIA*TotByProc
 TotEpi*Epidural
 TotGen*General
 TotSpi*Spinal
 TotMAC*MAC
 TotBlock*Block
 TotTopical*Topical
 TotLoc*Local
 TotIVC*IV-CON SED
 TotOther*Other
 TotNone*None
---PAIN AND COMPLICATIONS*
 Pain_Complic_NoPain-NoComplic*No Pain, No<br>Complications
 Pain_Complic_Pain*Pain
 Pain_Complic_Nausea*Nausea
Pain_Complic_Vomiting*Vomiting
 Pain Complic InabilityToVoid*Inability To Void
 Pain Complic Bleeding*Bleeding
 Pain_Complic_InstabVitalSigns*Instability Of<br/>Vital Signs
 Pain_Complic_LevelOfConscChanges*Level Of Conscious-<br/>br>ness Changes
 Pain Complic RespirProblems*Respiratory<br/>Problems
 ---PAIN CONTROL METHODS*
 Pain Control Meth PainContrMethExplOnDischarge*Pain Control<br/>br>Methods Explained<br/>on
 Discharge
 Pain_Control_Meth_PrescrGivenOnDischarge*Prescription<br/>Cortrol_Meth_PrescrGivenOnDischarge
 Pain_Control_Meth_PainVerb*Pain Verbalized
 Pain Control Meth MedOrdered * Medication < br > Ordered < br > (Who Had Pain)
 Pain Control Meth MedAdmin*Medication<br/>
or>Administered<br/>
(Who Had Pain)
 Pain_Control_Meth_MedAdminAndRefused*Medication<br/>
Administered<br/>
Who Refused<br/>
Who
 Had Pain)
 Pain_Control_Meth_PainRelieved*Pain Relieved<br > (Who Had Pain)
 ---AFTER LEAVING THE SURGERY CENTER*
 After_Leave_Surgery_Problems_Might_Have*Knew What Problrms<br>Might Have
After Leave Surgery Mho Call*Knew Who To Call
After Leave Surgery Meds To Use*Knew What<br/>br>Medicines to Use
After Leave Surgery Had Appointment*Had an Appointment
 After Leave Surgery Had All Info*Had All Information
 --- POSTOPERATIVE PATIENT INTERVIEW: <br/>
--- POSTOPERATIVE PATIENT PATIENT
Postop_Pat_Int_Complic_AnyProblem*Any Problem Postop_Pat_Int_Complic_Nausea*Nausea
 Postop_Pat_Int_Complic_Vomiting*Vomiting
 Postop_Pat_Int_Complic_Fever*Fever
 Postop_Pat_Int_Complic_ProblemUrine*Problem Urinating
Postop_Pat_Int_Complic_Bleeding*Bleeding
Postop_Pat_Int_Complic_SignsOfInf*Signs Of Infection
 --- PAIN MANAGEMENT AT HOME*
Pain_Manag_Home_PostopPainAtHome*Postop Pain<br/>
Home
Pain_Manag_Home_PostopInstrContrPain*Postop Instructed<br/>
to Control Pain<br/>
Home
Pain Manag Home ComplWithInstr*Complied with<br>Instructions
 ---PAIN RELIEF AT HOME FOR PATIENTS WHO HAD PAIN*TotByProc
Pain Relief Home Completely*Completely
Pain_Relief_Home_Greatly*Greatly
Pain_Relief_Home_Somewhat*Somewhat
Pain_Relief_Home_NotRelieved*Not Relieved
---PERCEIVED QUALITY IN REGISTRATION AND ADMISSION PROCESS*TotByProc
Perceived Quality Reg And Admis Excellent*Excellent
Perceived_Quality_Reg_And_Admis_Good*Good
```

Perceived Quality Reg And Admis Fair\*Fair
Perceived Quality Reg And Admis Poor\*Poor
Perceived Quality Reg And Admis N-A\*N/A

---PERCEIVED QUALITY AT PREADMISSION TESTING\*TotByProc
Perceived Quality Preadmis Excellent\*Excellent
Perceived Quality Preadmis Good\*Good
Perceived Quality Preadmis Fair\*Fair
Perceived Quality Preadmis Poor\*Poor
Perceived Quality Preadmis N-A\*N/A

---PERCEIVED QUALITY IN RECOVERY STAGE IN THE CENTER\*TotByProc
Perceived Quality Rec Stage Excellent\*Excellent
Perceived Quality Rec Stage Fair\*Fair
Perceived Quality Rec Stage Fair\*Fair
Perceived Quality Rec Stage Fair\*Fair
Perceived Quality Rec Stage Poor\*Poor
Perceived Quality Rec Stage N-A\*N/A

## Current version of Indicators.lst file

```
;General Indicators
 ---ind*ind2*General Indicators*%Average% Records: %TotMRAl1Sites%, %You%:
 %TotMRThisSite%. %Average% Interviews: %TotPIAllSites%, %You%: %TotPIThisSite%.
 ind1*Nummer1*TotMR*ind1
 ind2*Nummer2*TotMR*ind2
 ind3*Nummer3*TotMR*ind3
ind4*Nummer4*TotMR*ind4
 ind5*Nummer5*Denom5*ind5^^
IND6*Nummer6*TotPI*IND6
IND7*Nummer7*Denom7*IND7^^
IND8*Nummer8*TotPI*IND8
IND9*Nummer9*TotPI*IND9
IND10*Nummer10*TotPI*IND10
; indl by payor
---payor*payor2*Complications by Payor*%Average% Average Complication Rate:
%IndlAllSites%%. %You%: %IndlThisSite%%.
Care Indl*Care*TotCare*Medicare
Aid Ind1*Aid*TotAid*Medicaid
Com Ind1*Com*TotCom*Non-Capitated
Cap_Ind1*Cap*TotCap*Capitated
Uni_Ind1*Uni*TotUni*Uninsured
Wor_Ind1*Wor*TotWor*Workmens Comp
Oth Ind1*Oth*TotOth*Other
;indl by anesthesia
---anest*anest2*Complications by Anesthesia*%Average% Average Complication Rate:
%Ind1AllSites%%. %You%: %Ind1ThisSite%%.
EPI Ind1*EPI*TotEPI*Epidura1
GEN Ind1*GEN*TotGEN*General
Spi Ind1*Spi*TotSpi*Spinal
MAC Ind1*MAC*TotMAC*MAC
Block Ind1*Block*TotBlock*Block
Topical Ind1*Topical*TotTopical*Topical
Loc Ind1*Loc*TotLoc*Local
IVC Ind1*IVC*TotIVC*IV-CON SED
Other Ind1*Other*TotOther*Other
None Ind1*None*TotNone*None
;Surgery Time
 --*surgtime2*Surgery Time*Surgery Time (min)||%Average% average:
&Surgtime AvgAllSites& min. &You&: &Surgtime AvgThisSite& min.
SURGTIME-0-30V*SURGTIME-0-30*SURGTIME TOT*0-29
SURGTIME-30-60V*SURGTIME-30-60*SURGTIME TOT*30-59
SURGTIME-60-90V*SURGTIME-60-90*SURGTIME_TOT*60-89
SURGTIME-90-120V*SURGTIME-90-120*SURGTIME TOT*90-119
SURGTIME-120-150V*SURGTIME-120-150*SURGTIME_TOT*120-149
SURGTIME-150-180V*SURGTIME-150-180*SURGTIME_TOT*150-179
SURGTIME-180-210V*SURGTIME-180-210*SURGTIME_TOT*180-209
SURGTIME-210-240V*SURGTIME-210-240*SURGTIME_TOT*210-239
SURGTIME-240+V*SURGTIME-240+*SURGTIME TOT*240+
;Recovery Time
---*recovtime2*Recovery Time*Recovery Time (min)||%Average% average:
%Rectime_AvgAllSites% min. %You%: %Rectime_AvgThisSite% min.
RECTIME-0-30V*RECTIME-0-30*RECTIME_TOT*0-29
RECTIME-30-60V*RECTIME-30-60*RECTIME TOT*30-59
RECTIME-60-90V*RECTIME-60-90*RECTIME TOT*60-89
RECTIME-90-120V*RECTIME-90-120*RECTIME TOT*90-119
RECTIME-120-150V*RECTIME-120-150*RECTIME TOT*120-149
RECTIME-150-180V*RECTIME-150-180*RECTIME_TOT*150-179
RECTIME-180-210V*RECTIME-180-210*RECTIME_TOT*180-209
RECTIME-210-240V*RECTIME-210-240*RECTIME TOT*210-239
RECTIME-240+V*RECTIME-240+*RECTIME_TOT*240+
;Age Distribution
---*Age_Distribution2*Age Distribution*Age (years)||%Average% average:
%Age Distrib_AvgAllSites% yrs. %You%: %Age_Distrib_AvgThisSite% yrs.
Age Distrib 0-14V*Age Distrib 0-14*Age Distrib Tot*0-14
Age_Distrib_15-24V*Age_Distrib_15-24*Age_Distrib_Tot*15-24
```

```
Age_Distrib_25-3
Age_Distrib_25-34*Age_Distrib_Tot*4
Age_Distrib_35-44*Age_Distrib_35-44*Age_Distrib_Tot*35-44
Age_Distrib_45-54V*Age_Distrib_45-54*Age_Distrib_Tot*45-54
Age_Distrib_55-64V*Age_Distrib_55-64*Age_Distrib_Tot*55-64
Age_Distrib_65-74V*Age_Distrib_65-74*Age_Distrib_Tot*65-74
Age_Distrib_75-84V*Age_Distrib_75-84*Age_Distrib_Tot*75-84
Age_Distrib_85+V*Age_Distrib_85+*Age_Distrib_Tot*85+
```

## Current version of LogMessages.lst file

Report Start ReportStart Report End ReportEnd KillTreeMsg Tree was overwritten or deleted File was overwritten or deleted KillFileMsg QuarterReportStart Quarter Report is Starting Quarter Report is Completed QuarterReportEnd Monthly Report is Starting MonthReportStart MonthReportEnd Monthly Report is Completed Cumul Monthly Report is Starting MonthCumulReportStart = Cumul Monthly Report is Completed MonthCumulReportEnd Standard Report is Starting Standard Report is Completed StandardReportStart StandardReportEnd

# Current version of Comparison\_table.lst file

*		
TotMR*	*	Number of Patients*
Time (Minutes) *		
SurgTime Avg*	*	Time For Procedure*
RecTime Avg*	•	Time For Recovery*
	*	Time For Patient Interview*
IntTime_Avg*		Time for ractent interview
	<b>-</b>	
Problems Before Leaving Surgery Cente		
Patient_Dispos_Normal*	TotMR*	Percent Normal Discharge*
Pain Complic NoPain-NoComplic*	TotMR*	Percent without Problems*
Pain_Control_Meth_PainVerb*	TotMR*	Percent with Post Operative Pain*
Pain Control Meth MedOrdered*	Pain Control Meth PainVerb*	Anbspanbsp Percent Medications
Ordered*		•
Pain Control Meth PainRelieved*	Pain Control Meth PainVerb*	Percent Pain Relieved*
Pain Control Meth_PrescrGivenOnDischarge	* TotMP*	Percent Pain Prescription Given*
Pain Control Meth_PrescrigiveNonDischarge	charactTotMP#	Percent Pain Control Methods
	Charge Totrax	reitent rain control methods
Explained*		
After Leaving the Surgery Center*		
After Leave Surgery Problems Might_Have*	TotPI*	Percent That Knew What Problems They
Might Have*		
After_Leave_Surgery_Who_Call*	TotPI *	Percent Knew Who to Call*
After Leave Surgery Meds_To_Use*	TotPI*	Percent Knew Medications to Control
Pain*		
	TotPI*	Percent with Post Operative
After_Leave_Surgery_Had_Appointment*	ICCFI	rescent with foot operative
Appointment*	- 187	Descript the Head Cold Come Today
After_Leave_Surgery_Had_All_Info*	TotPI*	Percent Who Had Self Care Info*
Problems at Home*		
Postop Pat Int_Complic_AnyProblem*	TotPI*	Percent with Problem Related to
Procedure*		
Postop_Pat_Int_Complic_Nausea*	TotPI*	Nausea*
Postop_Pat_Int_Complic_Vomiting*	TotPI*	Vomiting*
Postop_Pat_Int_Complic_Fever*	TotPI*	Fever*
Postop_Pat_Int_Complic_ProblemUrine*	TotPI*	Difficulty Urinating*
Postop_Pat_Int_Complic_Ploblemofine	TotPI*	<pre>   Bleeding*</pre>
Postop_Pat_Int_Complic_Bleeding*		Signs of Infection*
Postop_Pat_Int_Complic_SignsOfInf*	Tot PI *	
Pain_Manag_Home_PostopPainAtHome*	Tot PI *	Percent Bothered by Pain*
Pain_Manag_Home_PostopInstrContrPain*	Pain_Manag_Home_PostopPainAtHome*	andspandsp Percent with Instruction
about Pain*		
Pain Manag_Home_ComplWithInstr*	Pain_Manag_Home_PostopPainAtHome*	anbspanbsp Percent Following
Instructions*		
Pain Relief Home Completely*	Pain Manag Home PostopPainAtHome*	anbspanbsp Percent Completely
Relieved*		•
Velleved		
Demonstrad Auglitu of Caret		
Perceived Quality of Care*	TotPI*	Percent Excellent Quality*
Nummer8*		Percent Excellent Registration and
Perceived_Quality_Reg_And_Admis_Excellent	- TOUPL-	retreat excertent registration and
Admission*		December Described Description
Perceived_Quality_Preadmis_Excellent*	Tot PI*	Percent Excellent Preadmission
Testing*		
Perceived_Quality_Rec_Stage_Excellent*	TotPI*	Percent Excellent Recovery Stage*
·- ·-		

```
29888* Arthroscopic ACL Repair
67916* Blephroplasty
67921* Blephroplasty
19325* Breast augmentation
19120* Breast Biopsy
19318* Breast reduction
31622* Bronchoscopy
31625* Bronchoscopy
28290* Bunionectomy
28292* Bunionectomy
28293* Bunionectomy
28294* Bunionectomy
28296* Bunionectomy
28297* Bunionectomy
28298* Bunionectomy
28299* Bunionectomy
29848* Carpal Tunnel
64721* Carpal Tunnel
66830* Cataract removal
66840* Cataract removal
66850* Cataract removal
66852* Cataract removal
66920* Cataract removal
66930* Cataract removal
66940* Cataract removal
66983* Cataract removal
66984* Cataract removal
45378* Colonoscopy, diagnostic
45380* Colonoscopy with biopsy
45384* Colonoscopy with biopsy
45385* Colonoscopy with biopsy
52000* Cystoscopy
52005* Cystoscopy
52007* Cystoscopy
52204* Cystoscopy
52281* Cystoscopy
58120* D&C/Hysteroscopy
58558* D&C/Hysteroscopy
43235* EGD
43239* EGD with biopsy
43248* EGD with dilation
43249* EGD with dilation
30520* ENT- Septoplasty
31255* ENT Sinus endoscopy
42820* ENT- T&A < 12
42826* ENT- Tonsillectomy > 12
69436* ENT- Tubes
69631* ENT- Tympanoplasty
49320* GYN laparoscopy
58660* GYN laparoscopy
58670* GYN laparoscopy
58671* GYN laparoscopy
49505* Hernia repair
49585* Hernia repair
29870* Knee Arthroscopy
29877* Knee Arthroscopy
29881* Knee Arthroscopy
29882* Knee Arthroscopy
29884* Knee Arthroscopy
47562* Laparoscopic cholecystectomy
47564* Laparoscopic cholecystectomy
19125* Needle localization breast biopsy
62310* Pain management -epidural
62311* Pain management -epidural
64510* Pain management -epidural
20550* Pain management -injection
55700* Prostate biopsy
30400* Rhinoplasty
15828* Rhytidectomy
23412* Shoulder Arthroplasty (open)
```

```
23450* Shoulder Proplasty (open)
23455* Shoulder Proplasty (open)
29815* Shoulder Arthroscopy, dx or tx
29819* Shoulder Arthroscopy, dx or tx
29820* Shoulder Arthroscopy, dx or tx
29821* Shoulder Arthroscopy, dx or tx
29822* Shoulder Arthroscopy, dx or tx
29823* Shoulder Arthroscopy, dx or tx
29825* Shoulder Arthroscopy, dx or tx
29826* Daparoscopy
56340* Laparoscopic cholecystectomy
56300* GYN laparoscopy
56302* GYN laparoscopy
56301* D&C/Hysteroscopy
56351* D&C/Hysteroscopy
62275* Pain management -epidural
62289* Pain management -epidural
62289* Pain management -epidural
```

# Current version of Sites.lst file

;"ALL" MUST BE FIRST

7 T T +	All Centers*	
ALL* aaa*	Central Indiana Orthopedic Surgery Center*	daniel
aab*	The Laser and Surgery Center*	helen
aac*	Genesis Surgery Center, LLC*	debbie
aad*	Valley Ambulatory Surgery Center*	jones
aae*	Roper West Ashley Surgery Center*	shannon
aaf*	UPMC Monroeville Ambulatory Surgery*	jennifer
aag*	Specialists Ambulatory Surgery Center*	johnson steve
aah*	Elliot 1-DAY Surgery Center*	kenny
aai* aak*	Endoscopy Center of Oakridge, LLC* Aestique Medical Center*	nancy
aak* aal*	The Clinic Surgery and Eye Center, LLP*	matthew
aam*	Sullivan Centre For Plastic & Reconstructive Surgery*	nelson
aan*	Abington Surgical Center*	allen
aap*	Roseburg Surgicenter, LTD*	tinker
aaq*	Proctology Associates*	lime
aar*	University Suburban Health Center*	peter
aas*	Lincoln Surgery Center*	karen elaine
aat*	Gastroenterology Associates, Inc. & The Endoscopy Center* Sandusky Plastic Surgery*	tom
aau* aav*	Decatur Ambulatory Surgery Center*	brian
aav aaw*	The Bay Area Surgery Center*	jim
aax*	Center for Special Surgery*	carry
aay*	The Kirklin Clinic Ambulatory Surgery Center*	terry
aaz*	Jefferson Memorial Surgery Center*	tonya
aba*	Ohio Surgery Center, LTD*	gene
abb*	Helix Health Surgi Center at Pasadena*	paper weight
abc*	EYE HEALTH ASSOCIATES OF WNY, PC* Grand Island Surgery Center*	program
abd* abe*	Zanesville Surgery Center*	phone
abe*	WILLIAM E BECKER MD PA ASC*	doctor
abg*	Maryville Surgical Center*	desk
abh*	Central Utah Surgical Center*	billy
abi*	Mt. Ogden Surgical Center*	rebecca
abj*	Davis Surgical Center*	ben
abk*	Great Basin Surgical Center*	plug sam
abl*	Minimally Invasive Surgery Center* Plastikos Surgery Center*	summer
abm* abn*	Endoscopy Center of Pennsylvania*	pencil
abn abo*	Fox Valley Orthopaedic Institute*	apple
abp*	Surgiplex*	winter
abq*	Northwest Surgery Center, LLC*	sand
abr*	Mercy Anderson Ambulatory Surgery*	fall
abs*	Urology Specialty & Surgery Ctr of SW LA*	speak sing
abt*	Commonwealth Orthopaedics* Virginia Eye Institute, Inc*	spring
abu* abv*	Reston Hospital Center*	trident
abv*	GI Endoscopy Center*	jacket
abx*	Blake Woods Medical Park Surgery Center*	alan
aby*	Norfolk Surgery Center*	jenny
abz*	The Cookeville Surgery Center*	mike
aca*	The Ambulatory Care Center*	timon hammer
acb*	Southern Surgery Center*	nail
acc* ace*	Findlay Surgery Center* Central Plains CL Surgery & Diagnostic*	indian
acf*	Frederick Surgical Center*	soda
acq*	Surgery Center of Ft. Collins*	play
ach*	Straith Clinic, PC*	rest
aci*	Effingham Ambulatory Surgery Center*	trip
aza*	Flagstaff Outpatient Surgery Center*	decker
lva*	Lakeview Medical Center, Inc.*	stovall diana
mfa*	Surgery Center of Southern Oregon, LLC*	barnes
msa*	The Microsurgery Center* Mississippi Valley Surgery Center, LLC*	andrews
mva*	Quad City Ambulatory Surgery Center*	miller
qca* rsa*	Virginia Ambulatory Surgery Center*	thomas
sba*	Surgicenter of Baltimore*	cornell
sca*	South Coast Surgery Center, LLC*	barker

#### Current version of Stage1.1st file

```
;Last Updated: 04/14/
   DOP*
   PAYOR*
   DISPOSITIO*
   RECTIME*
   SURGTIME*
   INTTIME*
  AGE*
       ;Anesthesia*Anesthesia
  ;Miscellaneous (PATINT2)
  ;INTIIME2*IIf(TimeDiff((START), [ENDTIME))<0,0,TimeDiff((START), [ENDTIME]))
Disp3*IIf(DISPOSITIO="3",True,False)
Disp2*IIf(DISPOSITIO="2",True,False)
  ;Miscellaneous (MEDREC)
  Anesthesia3*Left(Anesthesia,3)
 PAYOR3*Left(PAYOR, 3)
PV*IIf(pvl="y", True, False)
PR*IIf(prl="Y", True, False)
Ind2Threshold*
   General Indicators (PATINT2)
  Nummerl 1*IIf(Pain Complic Nausea 1 OR Pain Complic Vomiting 1 OR Pain Complic InabilityToVoid 1 OR Pain Complic Bleeding 1 OR Pain Complic InstabVitalSigns 1 OR Pain Complic LevelOfConscChanges 1 OR Pain Complic Respir
 Pain_Complic_RespirProblems_1, True, False)
Nummer6 1*IIf(Not(IIf(Postop_Pat_Int_Complic_Nausea_1 OR Postop_Pat_Int_Complic_Vomiting_1 OR
Postop_Pat_Int_Complic_Fever_1 OR Postop_Pat_Int_Complic_ProblemUrine_1 OR
Postop_Pat_Int_Complic_Bleeding_1 OR Postop_Pat_Int_Complic_SignsOfInf_1, True, False)) AND
Not(IsNull[PI_IDN), True, False)
Nummer7 1*IIf((PATINT2.inspain="Y") And Not(Not(folm="Y") and Not(folcom="Y")) And (usem="Y" Or
inscom="Y") And (folm="Y" Or folcom="Y") And (Left(relief,5)="compl") And (phome="Y"), True, False)
Denom7_1*IIf(phome="Y" and Not(Not(folm="Y") and Not(folcom="Y")), True, False)
Nummer8_1*IIf((qregadm="Excellent" OR qregadm="N/A") And (qpreadm="Excellent" OR qpreadm="N/A") And
(qrecov="Excellent" OR qrecov="N/A") AND (NOT (gregadm="N/A" AND qpreadm="N/A" AND
grecov="N/A")), True, False)
  qrecov="N/A")), True, False)
  Nummer9 1*IIf(Left(prob,1)="Y" And Left(whocall,1)="Y" And Left(med,1)="Y" And Left(app,1)="Y",True,False)
  Nummer10_1*IIf(Left(inf,1)="Y" And Left(prob,1)="Y" And Left(whocall,1)="Y" And Left(med,1)="Y" And
  Left (app, 1) = "Y", True, False)
; Pain and Complications (MEDREC)
Pain Complic Pain 1*IIf(LEFT(PAIN1,1)="Y" OR LEFT(PAIN2,1)="Y" OR LEFT(PAIN3,1)="Y",True,False)
Pain Complic Nausea 1*IIf(LEFT(NAUS1,1)="Y" OR LEFT(NAUS2,1)="Y" OR LEFT(NAUS3,1)="Y",True,False)
Pain Complic Vomiting 1*IIf(LEFT(NAUS1,1)="Y" OR LEFT(NAUS2,1)="Y" OR LEFT(NAUS3,1)="Y",True,False)
Pain Complic InabilityTovoid 1*IIf(LEFT(INVOID1,1)="Y" OR LEFT(INVOID2,1)="Y" OR
LEFT(INVOID3,1)="Y",True,False)
Pain Complic Placeding 1*IIf(LEFT(MEDREC PLEED1,1)="Y" OR LEFT(MEDREC PLEED2,1)="Y" OR
 Pain_Complic_Bleeding_1*IIf(LEFT(MEDREC.BLEED1,1)="Y" OR LEFT(MEDREC.BLEED2,1)="Y" OR LEFT(MEDREC.BLEED3,1)="Y", True, False)
Pain_Complic_InstabVitalSigns_1*IIf(LEFT(IVS1,1)="Y" OR LEFT(IVS2,1)="Y" OR LEFT(IVS3,1)="Y", True, False)
 Pain_Complic_LevelOfConscChanges_1*IIf(LEFT(LOC1,1)="Y" OR LEFT(LOC2,1)="Y" OR
 LEFT (LOC3, 1) = "Y", True, False)
 Pain Complic RespirProblems 1*IIf (LEFT (RESP1,1) = "Y" OR LEFT (RESP2,1) = "Y" OR LEFT (RESP3,1) = "Y", True, False)
 ; Pain Control Methods (MEDREC)
 Pain_Control_Meth_PrescrGivenOnDischarge_l*IIf(LEFT(PPG,1)="Y" ,True,False)
 Pain_Control_Meth_PainContrMethExplOnDischarge_1*IIf(LEFT(PCME,1)="Y" ,True,False)
 Pain_Control_Meth_PainVerb_l*IIf(LEFT(PV1,1)="Y",True,False)
Pain_Control_Meth_MedOrdered_l*IIf(LEFT(M01,1)="Y",True,False) AND Pain_Control_Meth_PainVerb_l
Pain_Control_Meth_MedAdmin_l*IIf(LEFT(MA1,1)="Y",True,False) AND Pain_Control_Meth_PainVerb_l
Pain_Control_Meth_MedAdminAndRefused_1*IIf(LEFT(MA1,1)="R",True,False) AND
Pain_Control_Meth_PainVerb_1
Pain_Control_Meth_PainRelieved_1*IIf(LEFT(PR1,1)="Y",True,False) AND Pain_Control_Meth_PainRelieved_1*IIf(LEFT(PR1,1)="Y",True,False) AND Pain_Control_Meth_PainVerb_1
 ;After Leaving the Surgery Center (PATINT2)
After Leave Surgery Problems Might Have 1*IIf(Left(Prob,1)="Y",True,False)
After Leave Surgery Who Call 1*IIf(Left(Whocall,1)="Y",True,False)
After Leave Surgery Meds To_Use_1*IIf(Left(Med,1)="Y",True,False)
After Leave Surgery Had Appointment 1*IIf(Left(App,1)="Y",True,False)
After Leave Surgery Had All Info_1*IIf(Left(Inf,1)="Y",True,False)
 ; Postoperative Complications (PATINT2)
Postop Pat Int Complic Nausea 1*IIf(PATINT2.nausea3="Y" Or PATINT2.nausea4="Y" Or PATINT2.nausea6="Y" Or PATINT2.nausea6="Y" Or PATINT2.nausea6="Y" Or PATINT2.nausea7="Y", True, False)
Postop Pat Int Complic Vomiting 1*IIf(PATINT2.vomit3="Y" Or PATINT2.vomit4="Y" Or PATINT2.vomit6="Y" Or PATINT2.vomit6="Y" Or PATINT2.vomit6="Y" Or PATINT2.vomit7="Y", True, False)
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POSTOD PAT_INT Completed ProblemUrine 1*IIf (PATINT2.fever3="Y" Or PATINT2.fever6="Y" Or PATINT2.fever6="Y" Or PATINT2.fever6="Y" Or PATINT2.fever6="Y" Or PATINT2.urine4="Y" Or PATINT2.urine5="Y" Or PATINT2.urine6="Y" Or PATINT2.urine6="Y" Or PATINT2.urine6="Y" Or PATINT2.urine6="Y", True, False)
POSTOD PAT_INT_Complic_Bleeding 1*IIf(PATINT2.bleed3="Y" Or PATINT2.bleed4="Y" Or PATINT2.bleed6="Y" Or PATINT2.bleed6="Y" Or PATINT2.bleed6="Y" Or PATINT2.bleed6="Y" Or PATINT2.infec6="Y" Or PATINT2.infec6="
         ; Postoperative Complications (PATINT2) -- Old Version
      ; Postoperative Complications (PATINT2) -- Old Version
; Postop Pat Int Complic Nausea 1*IIf(Left(Nauseal,1)="Y",True,False)
; Postop Pat Int Complic Vomiting 1*IIf(Left(Vomitl,1)="Y",True,False)
; Postop Pat Int Complic Fever 1*IIf(Left(Fever1,1)="Y",True,False)
; Postop Pat Int Complic ProblemUrine 1*IIf(Left(Urinel,1)="Y",True,False)
; Postop Pat Int Complic Bleeding 1*IIf(Left(Patint2.Bleed1,1)="Y",True,False)
; Postop Pat Int Complic SignsOfInf 1*IIf(Left(Infecl,1)="Y",True,False)
        ; Pain Management at Home (PATINT2)
        Pain_Manag_Home_PostopPainAtHome_1*IIf(Left(Phome,1)="Y",True,False)
Pain_Manag_Home_PostopInstrContrPain_1*IIf(Left(Phome,1)="Y" AND Left(Inspain,1)="Y",True,False)
Pain_Manag_Home_ComplWithInstr_1*IIf(Left(Phome,1)="Y" AND (Left(Folm,1)="Y" OR Left(Folcom,1)="Y")
      And IsNull(Foloth), True, False)
        ; Pain Relief at Home for Patients Who Had Pain (PATINT2)
      Pain_Relief_Home_Completely_1*IIf(Left(Phome,1)="Y" AND Left(Relief,3)="Com",True,False)
Pain_Relief_Home_Greatly_1*IIf(Left(Phome,1)="Y" AND Left(Relief,3)="Gre",True,False)
Pain_Relief_Home_Somewhat_1*IIf(Left(Phome,1)="Y" AND Left(Relief,3)="Som",True,False)
      Pain_Relief_Home_NotRelieved_1*IIf(Left(Phome,1)="Y" AND Left(Relief,3)="Not", True, False)
       ; Perceived Quality in Registr and Admission Process (PATINT2)
    ;rerceived Quality in kegistr and Admission Process (PATINT2)
Perceived Quality Reg_And_Admis_Excellent_1*IIf(Left(Qregadm, 3)="Exc", True, False)
Perceived Quality Reg_And_Admis_Good_1*IIf(Left(Qregadm, 3)="Goo", True, False)
Perceived Quality Reg_And_Admis_Fair_1*IIf(Left(Qregadm, 3)="Fai", True, False)
Perceived Quality Reg_And_Admis_Poor_1*IIf(Left(Qregadm, 3)="Poo", True, False)
Perceived Quality_Reg_And_Admis_N-A_1*IIf(Left(Qregadm, 3)="N/A", True, False)
   ;Perceived Quality at Preadmission Testing (PATINT2)
Perceived Quality_Preadmis_Excellent_1*IIf(Left(Qpreadm, 3) = "Exc", True, False)
Perceived_Quality_Preadmis_Good_1*IIf(Left(Qpreadm, 3) = "Goo", True, False)
Perceived_Quality_Preadmis_Fair_1*IIf(Left(Qpreadm, 3) = "Fai", True, False)
Perceived_Quality_Preadmis_Poor_1*IIf(Left(Qpreadm, 3) = "Poo", True, False)
Perceived_Quality_Preadmis_N-A_1*IIf(Left(Qpreadm, 3) = "N/A", True, False)
   , Perceived Quality in Recovery stage in the Center (PATINT2)
Perceived Quality_Rec_Stage_Excellent_l*IIf(Left(Qrecov,3)="Exc",True,False)
Perceived Quality_Rec_Stage_Good_l*IIf(Left(Qrecov,3)="Goo",True,False)
Perceived_Quality_Rec_Stage_Fair_l*IIf(Left(Qrecov,3)="Fai",True,False)
Perceived_Quality_Rec_Stage_Poor_l*IIf(Left(Qrecov,3)="Poo",True,False)
Perceived_Quality_Rec_Stage_N-A_l*IIf(Left(Qrecov,3)="N/A",True,False)
;Age Distribution (MEDREC)
Age Distrib_0-14 1*IIf(AGE>0 AND AGE<15, True, False)
Age Distrib_15-24 1*IIf(AGE>=15 AND AGE<25, True, False)
Age Distrib_25-34 1*IIf(AGE>=25 AND AGE<35, True, False)
Age Distrib_35-44 1*IIf(AGE>=35 AND AGE<35, True, False)
Age Distrib_45-54 1*IIf(AGE>=45 AND AGE<55, True, False)
Age Distrib_55-64 1*IIf(AGE>=55 AND AGE<65, True, False)
Age Distrib_55-64 1*IIf(AGE>=65 AND AGE<65, True, False)
Age Distrib_75-84 1*IIf(AGE>=65 AND AGE<75, True, False)
Age Distrib_85+ 1*IIf(AGE>=85 AND AGE<120, True, False)
Age Distrib_85+ 1*IIf(AGE>=85 AND AGE<=120, True, False)
Age Distrib_Tot_1*IIf(AGE>=0 AND AGE<=120, True, False)
     ; Age Distribution (MEDREC)
'Recovery Time Distrubution (MEDREC)
RECTIME-0-30 1*IIf(RECTIME>0 and RECTIME<30, True, False)
RECTIME-30-60_1*IIf(RECTIME>=30 and RECTIME<60, True, False)
RECTIME-60-90 1*IIf(RECTIME>=60 and RECTIME<90, True, False)
RECTIME-90-120_1*IIf(RECTIME>=90 and RECTIME<120, True, False)
RECTIME-120-150_1*IIf(RECTIME>=120 and RECTIME<150, True, False)
RECTIME-150-180_1*IIf(RECTIME>=150 and RECTIME<180, True, False)
RECTIME-180-210_1*IIf(RECTIME>=180 and RECTIME<210, True, False)
RECTIME-210-240_1*IIf(RECTIME>=210 and RECTIME<240, True, False)
RECTIME-240+ 1*IIf(RECTIME>=240 , True, False)
RECTIME_TOT_1*IIf(RECTIME>0 , True, False)
    ; Recovery Time Distrubution (MEDREC)
 ;Surgery Time Distribution (MEDREC)
SURGTIME-0-30 1*IIf(SURGTIME>0 and SURGTIME<30,True,False)
SURGTIME-30-60 1*IIf(SURGTIME>=30 and SURGTIME<60,True,False)
SURGTIME-60-90 1*IIf(SURGTIME>=60 and SURGTIME<90,True,False)
 SURGTIME-90-120 1*IIf(SURGTIME>=90 and SURGTIME<120, True, False)
SURGTIME-120-150 1*IIf(SURGTIME>=120 and SURGTIME<150, True, False)
SURGTIME-150-180 1*IIf(SURGTIME>=150 and SURGTIME<180, True, False)
SURGTIME-180-210 1*IIf(SURGTIME>=180 and SURGTIME<210, True, False)
SURGTIME-210-240 1*IIf(SURGTIME>=210 and SURGTIME<240, True, False)
  SURGTIME_240+ 1*IIf(SURGTIME>=240 ,True,False)
SURGTIME_TOT_I*IIf(SURGTIME>0 ,True,False)
```



```
:Header
                                                                                           Count(Site) **
     TotMR*
                                                      Long*
                                                                                          Count (PI_IDN) **
     TotPI*
                                                     Long*
     ;General Indicators (MEDREC)
                                                                                          Count(IIf(Nummerl_1,True,Null))**
Count(IIf(RECTIME>Ind2Threshold,True,Null))**
     Nummer1*
                                                     Long*
                                                     Long*
     Nummer2*
                                                                                          Count (IIf (Disp3, True, Null)) **
Count (IIf (Disp2, True, Null)) **
     Nummer3*
                                                     Long*
     Nummer4*
                                                     Long*
                                                                                           Count(IIf(PV And Not(PR), True, Null)) **
     Nummer5*
     Denom5*
                                                     Long*
                                                                                          Count(IIf(PV,True,Null)) **
     ;General Indicators (PATINT2)
                                                                                         Count (IIf (Nummer6_1, True, Null)) **
Count (IIf (Nummer7_1, True, Null)) **
Count (IIf (Denom7_1, True, Null)) **
Count (IIf (Nummer8_1, True, Null)) **
Count (IIf (Nummer9_1, True, Null)) **
Count (IIf (Nummer10_1, True, Null)) **
                                                    Long*
    Nummer6*
                                                     Long*
    Nummer7*
     Denom7*
                                                     Long*
    Nummer8*
                                                     Long*
                                                     Long*
    Nummer9*
    Nummer 10*
                                                     Long*
    ;Complications by Payor (MEDREC)
                                                                                         Count(IIf(PAYOR="Medicare",True,Null))**
Count(IIf(PAYOR="Medicare" AND Nummerl_1,True,Null))**
Count(IIf(PAYOR="Medicaid",True,Null))**
Count(IIf(PAYOR="Medicaid" AND Nummerl_1,True,Null))**
    TotCare*
                                                     Long*
    Care*
                                                     Long*
    TotAid*
                                                     Long*
                                                     Long*
                                                                                        Count(IIf(PAYOR="Medicaid" AND Nummerl_1,True,Null)
Count(IIf(Payor3="Com",True,Null)) **
Count(IIf(Payor3="Com", AND Nummerl_1,True,Null)) **
Count(IIf(Payor3="Cap",True,Null)) **
Count(IIf(Payor3="Cap" AND Nummerl_1,True,Null)) **
Count(IIf(Payor3="Uni",True,Null)) **
Count(IIf(Payor3="Uni",AND Nummerl_1,True,Null)) **
Count(IIf(Payor3="Wor",True,Null)) **
Count(IIf(Payor3="Wor",AND Nummerl_1,True,Null)) **
Count(IIf(Payor3="Oth",True,Null)) **
Count(IIf(Payor3="Oth",AND Nummerl_1,True,Null)) **
    Aid*
    TotCom*
                                                     Long*
    Com*
                                                     Long*
    TotCap*
                                                     Long*
    Cap*
                                                     Long*
    TotUni*
                                                     Long*
                                                     Long*
    Uni*
    TotWor*
                                                     Long*
    Wor*
                                                     Long*
    TotOth*
                                                    Long*
                                                    Long*
    Oth*
                                                                                       a (MEDREC)

Count(IIf(Anesthesia3="Epi",True,Null))**

Count(IIf(Anesthesia3="Gen",True,Null))**

Count(IIf(Anesthesia3="Gen",True,Null))**

Count(IIf(Anesthesia3="Gen",True,Null))**

Count(IIf(Anesthesia3="Spi",True,Null))**

Count(IIf(Anesthesia3="Spi",True,Null))**

Count(IIf(Anesthesia3="MAC",True,Null))**

Count(IIf(Anesthesia3="MAC",True,Null))**

Count(IIf(Anesthesia3="MAC",AND Nummerl 1,True,Null))**

Count(IIf(Anesthesia3="Blo",True,Null))**

Count(IIf(Anesthesia3="Blo",True,Null))**

Count(IIf(Anesthesia3="Top",True,Null))**

Count(IIf(Anesthesia3="Top",True,Null))**

Count(IIf(Anesthesia3="Loc",True,Null))**

Count(IIf(Anesthesia3="Loc",True,Null))**

Count(IIf(Anesthesia3="IV-",True,Null))**

Count(IIf(Anesthesia3="IV-",True,Null))**

Count(IIf(Anesthesia3="Oth",True,Null))**

Count(IIf(Anesthesia3="Oth",True,Null))**

Count(IIf(Anesthesia3="Non",True,Null))**

Count(IIf(Anesthesia3="Non",True,Null))**

Count(IIf(Anesthesia3="Non",True,Null))**

Count(IIf(Anesthesia3="Non",True,Null))**

Count(IIf(Anesthesia3="Non",True,Null))**
    (MEDREC)
                                                    Long*
    TotEpi*
                                                    Long*
   Epi*
   TotGen*
                                                     Long*
                                                    Long*
   Gen*
   TotSpi*
                                                    Long*
                                                    Long*
   Spi*
                                                    Long*
   TotMAC*
                                                    Long*
   MAC*
   TotBlock*
                                                    Long*
   Block*
                                                    Long*
   TotTopical*
                                                    Long*
   Topical*
                                                    Long*
   TotLoc*
                                                    Long*
   Loc*
   TotIVC*
                                                    Long*
   IVC*
                                                    Long*
   TotOther*
                                                    Long*
                                                    Long*
   Other*
  TotNone*
                                                    Long*
   None*
   ; Pain Disposition (MEDREC)
  Patient Dispos RetainedMore3Hrs*
Patient Dispos Hospital*
Patient Dispos Reoperated*
                                                                                                                                                     Count(IIf(DISPOSITIO="1",True,Null))**
Count(IIf(DISPOSITIO="2",True,Null))**
Count(IIf(DISPOSITIO="3",True,Null))**
                                                                                                                Long*
                                                                                                                Long*
                                                                                                               Long*
                                                                                                                                                     Count(IIf(DISPOSITIO="4", True, Null)) **
   Patient_Dispos_Normal*
Pain_Complic_NoPain=NoComplic* Long* Count(IIf(Pain_Complic_Pain_1 OR Pain_Complic_Nausea_1 OR Pain_Complic_Vomiting_1 OR Pain_Complic_InabilityToVoid_1 OR Pain_Complic_Bleeding_1 OR Pain_Complic_RespirProblems_1,Null,True))**
Pain_Complic_RespirProblems_1,Null,True))**
Pain_Complic_Pain* Long* Count(IIf(Pain_Complic_Pain_1,True,Null))**
Pain_Complic_Nausea* Long* Count(IIf(Pain_Complic_Nausea_1,True,Null))**
Pain_Complic_Vomiting* Long* Count(IIf(Pain_Complic_Nausea_1,True,Null))**
Pain_Complic_InabilityToVoid* Long* Count(IIf(Pain_Complic_InabilityToVoid_1,True,Null))**
Pain_Complic_Bleeding* Long* Count(IIf(Pain_Complic_Bleeding_1,True,Null))**
Pain_Complic_InstabVitalSigns* Long* Count(IIf(Pain_Complic_Bleeding_1,True,Null))**
Pain_Complic_LevelOfConscChanges* Long* Count(IIf(Pain_Complic_InstabVitalSigns_1,True,Null))**
Pain_Complic_RespirProblems* Long* Count(IIf(Pain_Complic_RespirProblems_1,True,Null))**
  ; Pain Control Methods (MEDREC)
```

```
Pain_Control_Meth_Pain_rb* Lon
Count(IIf(Pain_Control_meth_PainVerb_1,True,Null))!*
Pain_Control_Meth_MedOrdered* Lon
       Count (IIf (Pain_Control_Meth_MedOrdered_1, True, Null)) **
       Pain_Control_Meth_MedAdmin*
     Pain_Control meth_medAdmin_1,True,Null))**
Pain_Control Meth_MedAdmin_1,True,Null))**
Count(IIf(Pain_Control Meth_MedAdminAndRefused* Long*
Count(IIf(Pain_Control Meth_MedAdminAndRefused_1,True,Null))**
       Pain_Control_Meth_PainRelieved*
     Count (IIf(Pain_Control_Meth_PainRelieved_1,True,Null))**
Pain_Control_Meth_PrescrGivenOnDischarge* Long*
Count (IIf(Pain_Control_Meth_PrescrGivenOnDischarge_1,True,Null))**
Pain_Control_Meth_PainContrMethExplOnDischarge* Long*
       Count(IIf(Pain_Control_Meth_PainContrMethExplOnDischarge_1,True,Null)) **
       ;After Leaving the Surgery Center (PATINT2)
     ;After Leaving the Surgery Center (FAILM12)
After_Leave_Surgery_Problems_Might_Have* Long*
Count(IIf(After_Leave_Surgery_Problems_Might_Have_1,True,Null))**
After_Leave_Surgery_Who_Call* Long*
Count(IIf(After_Leave_Surgery_Who_Call_1,True,Null))**
      After_Leave_Surgery_Meds_To_Use*
                                                                                                                                                                                                                                Long*
     Count(IIf(After_Leave_Surgery_Meds_To_Use_1,True,Null))**

After_Leave_Surgery_Had_Appointment * Long*

Count(IIf(After_Leave_Surgery_Had_Appointment_1,True,Null))**

After_Leave_Surgery_Had_All_Info* Long*

Count(IIf(After_Leave_Surgery_Had_All_Info_1,True,Null))**
       ; Postoperative Complications (PATINT2)
     Postop Pat Int Complic AnyProblem* Long* Count(IIf(Postop Pat Int Complic Nausea 1 OR Postop Pat Int Complic Vomiting 1 OR Postop Pat Int Complic ProblemUrine 1
    Postop_Pat_Int_Complic_Nausea* Long*
Count(IIf(Postop_Pat_Int_Complic_Nausea_1,True,Nul1))**
Postop_Pat_Int_Complic_Vomiting* Long*
   Postop Pat Int_Complic_Vomiting*
Count(IIf(Postop Pat Int_Complic_Powniting_1, True, Null))**
Postop Pat_Int_Complic_Fever*
Long*
Count(IIf(Postop Pat Int_Complic_Fever_1, True, Null))**
Postop_Pat_Int_Complic_ProblemUrine*
Count(IIf(Postop Pat Int_Complic_ProblemUrine_1, True, Null))**
Postop_Pat_Int_Complic_Bleeding*
Long*
   Count(IIf(Postop Pat Int Complic Bleeding 1, True, Null))**
Postop Pat Int Complic SignsOfInf* Long*
Count(IIf(Postop Pat Int Complic SignsOfInf 1, True, Null))**
     ; Pain Management at Home (PATINT2)
    Pain Manag Home PostopPainAtHome* Long*
Count(IIf(Pain Manag Home PostopPainAtHome 1,True,Null))**
Pain Manag Home PostopInstrContrPain* Long*
Count(IIf(Pain Manag Home PostopInstrContrPain 1,True,Null))**
Pain Manag Home ComplWithInstr* Long*
    Count(IIf(Pain_Manag_Home_ComplWithInstr_1,True,Null)) **
    ; Pain Relief at Home for Patients Who Had Pain (PATINT2)
   Pain Relief Home Completely*
Pain Relief Home Greatly*
Pain Relief Home Somewhat*
Pain Relief Home NotRelieved*
                                                                                                                                                                                                                                                          Count(IIf(Pain Relief Home Completely 1,True,Null))*
Count(IIf(Pain Relief Home Greatly 1, True, Null))**
Count(IIf(Pain Relief Home Somewhat 1, True, Null))**
                                                                                                                                           Long*
Long*
                                                                                                                                                                                            Long*
                                                                                                                                                                                                                                                           Count(IIf(Pain_Relief_Home_NotRelieved_1,True,Null)) **
                                                                                                                                                                                           Long*
;Perceived Quality in Registr and Admission Process (PATINT2)
Perceived Quality Reg And Admis Excellent* Long*
Count(IIIf(Perceived_Quality_Reg_And_Admis_Excellent_1,True,Null))**
Perceived Quality Reg_And_Admis_Good* Long*
Count(IIIf(Perceived_Quality_Reg_And_Admis_Good_1,True,Null))**
Perceived Quality Reg_And_Admis_Fair* Long*
Count(IIIf(Perceived_Quality_Reg_And_Admis_Fair_1,True,Null))**
Perceived Quality Reg_And_Admis_Poor* Long*
Count(IIIf(Perceived_Quality_Reg_And_Admis_Poor_1,True,Null))**
Perceived_Quality_Reg_And_Admis_N-A* Long* Count(A_1],True,Null))**
                                                                                                                                                                                                                                                                                              Count(IIf([Perceived_Quality_Reg_And_Admis_N-
;Perceived Quality at Preadmission Testing (PATINT2)
Perceived_Quality_Preadmis_Excellent* Long*
Count(IIIf(Perceived_Quality_Preadmis_Excellent_1,True,Null))**
Perceived_Quality_Preadmis_Good* Long*
Count(IIIf(Perceived_Quality_Preadmis_Good_1,True,Null))**
Perceived_Quality_Preadmis_Fair* Long*
Count(IIIf(Perceived_Quality_Preadmis_Fair_1,True,Null))**
Perceived_Quality_Preadmis_Foor* Long*
Count(IIIf(Perceived_Quality_Preadmis_Poor_1,True,Null))**
Perceived_Quality_Preadmis_N-A* Long* Count(IIIf(Parceived_Quality_Preadmis_N-A* Long* Count(IIIf(Parceived_Quality_Parceived_Quality_Parceived_Quality_Parceived_Quality_Parceived_Quality_Parceived_Quality_Parceived_Quality_Parceived_Quality_Parceived_Quality_Parceived_Quality_Parceived_Quality_Parceived_Quality_Parceived_Quality_Parceived_Quality_Parceived_Quality_Parceived_Quality_Parceived_Quality_Parceived_Quality_Parceived_Quality_Parceived_Quality_Parceived_Quality_Parceived_Quality_Parceived_Quality_Parceived_Quality_Parceived_Quality_Parceived_Quality_Parceived_Quality_Parceived_Quality_Parceived_Quality_Parceived_Quality_Parceived_Quality_Parceived_Quality_Parceived_Quality_Parceived_Quality_Parceived_Quality_Parceived_Quality_Parceived_Qu
    ; Perceived Quality at Preadmission Testing (PATINT2)
                                                                                                                                                                                                                                                               Count(IIf([Perceived Quality_Preadmis_N-
   ', Perceived Quality in Recovery stage in the Center (PATINT2)
Perceived Quality_Rec_Stage_Excellent* Long*
```

```
Perceived_Quality_Re ge_Fair* Long*
Count(IIf(Perceived ty_Rec_Stage_Fair_1,True,Null))**
Perceived_Quality_Rec_Stage_Poor* Long*
Count(IIf(Perceived_Quality_Rec_Stage_Poor_1,True,Null))**
 Perceived Quality Rec_Stage N-A*
A_1], True, Null))**
                                                                                                             Long*
                                                                                                                                                Count(IIf([Perceived_Quality_Rec_Stage N-
 ;Age distribution (MEDREC)
Age_Distrib_Avg*
Age_Distrib_0-14*
Age_Distrib_15-24*
                                                                                                      Avg(IIf(AGE>0 AND AGE<120,AGE,Null))*
Count(IIf([Age_Distrib_0-14_1],True,Null))**
Count(IIf([Age_Distrib_15-24_1],True,Null))**
Count(IIf([Age_Distrib_25-34_1],True,Null))**
Count(IIf([Age_Distrib_35-44_1],True,Null))**
Count(IIf([Age_Distrib_35-44_1],True,Null))**
Count(IIf([Age_Distrib_55-64_1],True,Null))**
Count(IIf([Age_Distrib_65-74_1],True,Null))**
Count(IIf([Age_Distrib_65-74_1],True,Null))**
Count(IIf([Age_Distrib_65-74_1],True,Null))**
Count(IIf([Age_Distrib_65-74_1],True,Null))**
Count(IIf([Age_Distrib_65-1],True,Null))**
                                                                    Single*
                                                                                                        Avg(IIf(AGE>0 AND AGE<120, AGE, Null)) *
                                                                                                                                                                                                                       Age_Distrib_Tot*
                                                                   Long*
                                                                    Long*
 Age_Distrib_25-34*
                                                                    Long*
Age Distrib 35-44*
Age Distrib 45-54*
Age Distrib 55-64*
Age Distrib 65-74*
Age Distrib 75-84*
                                                                   Long*
                                                                    Long*
                                                                    Long*
                                                                    Long*
                                                                    Long*
                                                                   Long*
 Age Distrib 85+*
 Age_Distrib_Tot*
                                                                   Long*
 ; Recovery Time Distrubution (MEDREC)
                                                     Single*
                                                                                      Avg(RECTIME)*
Count(IIf([RECTIME-0-30_1], True, Null))**
Count(IIf([RECTIME-30-60_1], True, Null))**
Count(IIf([RECTIME-60-90_1], True, Null))**
Count(IIf([RECTIME-60-90_1], True, Null))**
Count(IIf([RECTIME-90-120_1], True, Null))**
Count(IIf([RECTIME-150-180_1], True, Null))**
Count(IIf([RECTIME-180-210_1], True, Null))**
Count(IIf([RECTIME-120-240_1], True, Null))**
Count(IIf([RECTIME-240+1], True, Null))**
Count(IIf([RECTIME_TOT_1], True, Null))**
                                                                                        Avg (RECTIME) *
                                                                                                                                                                                                   RECTIME_TOT*
RECTIME -0-30*
RECTIME -30-60*
RECTIME -60-90*
                                                    Long*
                                                    Long*
                                                    Long*
RECTIME-90-120*
                                                    Long*
RECTIME-120-150*
                                                    Long*
 RECTIME-150-180*
                                                    Long*
RECTIME-180-210*
                                                    Long*
                                                    Long*
RECTIME-210-240*
RECTIME-240+*
                                                    Long*
RECTIME_TOT*
                                                    Long*
 ;Surgery Time Distribution (MEDREC)
                                                                                                                                                                                                SURGTIME TOT*
                                                                                            Avg (SURGTIME) *
Surgtime Avg
                                                              Single*
                                                                                           Avg(SURGTIME) *
Count(IIf([SURGTIME-0-30 1],True,Null)) **
Count(IIf([SURGTIME-30-60 1],True,Null)) **
Count(IIf([SURGTIME-60-90 1],True,Null)) **
Count(IIf([SURGTIME-90-120 1],True,Null)) **
Count(IIf([SURGTIME-120-150 1],True,Null)) **
Count(IIf([SURGTIME-150-180 1],True,Null)) **
Count(IIf([SURGTIME-180-210 1],True,Null)) **
Count(IIf([SURGTIME-210-240 1],True,Null)) **
Count(IIf([SURGTIME-240+ 1],True,Null)) **
Count(IIf([SURGTIME-TOT_1],True,Null)) **
SURGTIME-0-30*
                                                              Long*
SURGTIME-30-60*
                                                              Long*
SURGTIME-60-90*
SURGTIME-90-120*
SURGTIME-120-150*
                                                              Long*
                                                              Long*
SURGTIME-150-180*
                                                              Long*
SURGTIME-180-210*
                                                              Long*
SURGTIME-210-240*
                                                             Long*
SURGTIME-240+*
                                                              Long*
                                                             Long*
SURGTIME_TOT
;Miscellaneous (PATINT2)
                                                                                            Avg(IIf(INTTIME>=1 AND INTTIME<=20,INTTIME,Null))*
                                                                                                                                                                                                                                           TotPI*
                                                             Single*
IntTime_Avg*
```

# Current version of Corporate Members.lst file

```
; Format:
; ;---Group's Name*Group's Username* Group's UserCode*Allow separate members to access their reports (Yes|No)
; center1
; center2

---ASC Group*pinewood*zaa*no
aba
abh
acd
acc
abi
abj
abg
abk
```

### Current version of new-soix.ini file

;This file includes paths to Program folder, INI folder and Log folder. ;Edit it and copy to %windir% directory ;Caution: Do not put "\" at the end of folder names ;-----Shared parameters INIPath =c:\SOIX\Soix Report System\INI LogPath =c:\SOIX\Soix Report System\Log =c:\SOIX\Soix\_Report\_System\DATA\OMS2\_Archive OMS2ArchiveDirectory OMS2BackupDirectory =c:\SOIX\Soix Report System\DATA\OMS2 Backup MDBFile =c:\SOIX\Soix\_Report\_System\DATA\SOIX.MDB =c:\SOIX\Soix\_Report\_System\1st
=c:\SOIX\Soix\_Report\_System\TEMPLATE LSTPath TemplateDirectory UploadDirectory =C:\SOIX\WebSites\SOIX\upload =C:\SOIX\WebSites\SOIX\Centers InternetDirectory =C:\SOIX\WebSites\SOIX\NEW NewReportsInternetDirectory ;----for paper reports SavePathForPaperReport =c:\SOIX\WebSites\SOIX\Paper\_Reports ;Target = Web | Folder =Folder Target ;----New sites preparation NTSecDirectory =c:\Admin Stuff\NTSec =C:\SOIX\\webSites\soix users ApacheUsersFile =C:\SOIX\WebSites\soix\_groups ApacheGroupsFile NewCenterTemplateFolder =c:\SOIX\Soix\_Report\_System\Template\NewCenterTemplateFolder PrepareUploadStuff PrepareDownloadStuff =Yes

=Yes

PrepareHTMLFiles

Patent Application Attorney Docket No.: 58367.000003

EXHIBIT B

August 4, 1998 Ref.: 353-98 (P98.810)

Louis F. Rossiter, Ph.D. President and CEO Chironet, LLC 1899-A Billingsgate Circle Richmond, VA 23233

#### Dear Dr. Rossiter:

Social & Scientific Systems, Inc. (SSS), proposes to assist Chironet, LLC, in commercializing the existing Outcomes Monitoring System for Ambulatory Surgery in order to create the Surgical Outcome Information Exchange (SOIE) system. As discussed in conversations between you and Allen Kendall, we will provide advice on procuring hardware, software, and Internet connectivity; hypertext markup language (HTML) and graphics design services; computer programming; and ongoing technical support.

We understand that as part of the development of new software under this contract, employees of SSS will be given access to algorithms that are the property of Chironet. We agree not to disclose these proprietary algorithms to any other party, and we agree that we will not use these algorithms in any other work without your written permission.

We have divided the work into two parts. Part I will be performed on a fixed-price basis, as described in the attached Work Statement. The total cost for Part I is \$21,000; it will be completed within 4 months of the effective date of this contract. SSS will bill Chironet \$5,250 at the end of each of these four months. Payment of invoices is due within 15 days of receipt.

Part II consists of ongoing technical support for a period of 8 months following the completion of Part I. We propose Part II on a time-and-materials basis with a ceiling amount of \$8,000. Chironet will be billed for the actual hours expended at the rates quoted on the attached Rate Schedule. Non-labor costs will be billed at cost plus 15%. We will submit monthly invoices for work under Part II; payment will be due within 15 days of receipt.

Our proposed project manager for this effort will be Mr. Allen Kendall. He will serve as the principal point of contact regarding technical performance. Questions regarding contract or billing issues should be directed to me.

As part of this agreement, it is understood that Chironet will not hire any SSS staff during the period of performance and for 1 year after the completion of the contract.

If the proposed arrangement is satisfactory, an authorized person at Chironet, should sign two copies of this agreement as indicated below and return one to me. Any changes to the terms of this contract must be agreed to in writing by both parties. This letter constitutes the entire understanding and agreement between SSS and Chironet and supersedes any prior agreements, commitments, or communications about the project.

Please do not hesitate to contact me or Allen Kendall, if you have any questions about this proposal.

Sincerely,

Mary Frances leMal
Mary Frances leMat

President

Signature	

# Statement of Work Developing the Surgical Outcome Information Exchange (SOIE)

## Part I - Fixed Price Consulting

## Task 1 - Consulting on Procurement

Under this task, SSS staff will provide advice on procuring a Windows NT Server to host the SOIE, including hardware and software. SSS will also advise on procuring Internet connectivity for this system. We expect that the new system to be procured by Chironet will include NT Server, the Internet Information Server (part of NT Server), Visual Basic Professional Edition, and Access 97, and may include Excel 97 (see Task 2). This task will take approximately 2 person days of effort.

## Task 2 - Developing New Software

Under this task, SSS staff will develop a replacement for the existing batch-mode processing software used in the Outcomes Monitoring System for Ambulatory Surgery. The replacement software will move newly received data to a central database and then process the stored information for each participating Ambulatory Surgical Center (ASC) in turn. Statistics will be calculated for each ASC and will be used to construct graphs comparing the ASC's performance to appropriate norms. The graphs will be embedded in HTML pages and stored on Chironet's Web Server. The statistics and graphs produced by the replacement software will be the same as those currently produced by the Outcomes Monitoring System for Ambulatory Surgery.

We will use Visual Basic for this programming and an Access 97 database. We may incorporate functionality from Excel 97 to create the graphs, depending on our analysis of the best method to use for this process. The approximate level of effort for this task is 3½ person weeks.

## Task 3 - Redesigning Web Pages

Under this task, SSS will provide editing and HTML and graphics design services to redesign the Web site currently used for the Outcomes Monitoring System for Ambulatory Surgery. The redesign will focus on presenting a consistent, professional appearance. The approximate level of effort for this task is 2 person weeks.

Total for Part I: \$21,000

Period of Performance: 4 months

#### Part II - Ongoing Technical Support

This task will provide access to SSS staff for 8 months after the completion of Part I. Chironet will be billed for actual hours worked, up to a ceiling amount of \$8,000. Staff will be billed according to the attached Rate Schedule. Non-labor costs will be billed at cost plus 15%.

# Rate Schedule SSS Microcomputer Specialists and Programmers

The following labor rates are valid until October 1, 1999, at which time SSS will release a new set of rates. Non-labor expenses will be billed at cost plus 15%.

# Microcomputer Specialist Rates

Sr. Microcomputer/Network Consultant	106
Microcomputer/Network Consultant	92
Sr. Microcomputer/Network Specialist	81
Microcomputer/Network Specialist	75
Microcomputer Technical Specialist	62

## Programmer Rates

Sr. Systems Analyst	106
Systems Analyst	92
Sr. Programmer Analyst	81
Programmer Analyst	75
Sr. Programmer	62
	57
Programmer/Technical Specialist	-

Patent Application Attorney Docket No.: 58367.000003

EXHIBIT C

an employee-owned company

Chironet, LLC 1899-A Billingsgate Circle Richmond, Virginia 23233

Invoice No. 292-98 November 30, 1998

#### INVOICE

Contract Number SSS Project Number Letter of Agreement dated August 4, 1998

Maximum Liability - Part I Maximum Liability - Part II

\$21,000 \$8,000

CNET1

V - 1 Voucher Number

For consulting services performed related to Part I of the above cited letter of agreement. Re: Developing the Surgical Outcome Information Exchange (SOIE)

During the period October 15, 1998 to November 30, 1998. ok to pay of 11,199

Total Due

\$5,250.00

Sincerely,

Flavia A. Threatt

Accounting Manager

an employee-owned company

Chironet, LLC 1899-A Billingsgate Circle Richmond, Virginia 23233 Invoice No. 323-98 December 31, 1998

#### INVOICE

Contract Number -- Letter of Agreement dated August 4, 1998

SSS Project Number -- CNET1

Maximum Liability - Part I -- \$21,000

Maximum Liability - Part II -- \$8,000

Voucher Number -- V - 2

For consulting services performed related to Part I of the above cited letter of agreement. Re: Developing the Surgical Outcome Information Exchange (SOIE) During the period December 1-31 1998.

**Total Due** 

\$5,250.00

Sincerely,

Flavia A. Threatt
Accounting Manager

an employee-owned company

Chironet, LLC 1899-A Billingsgate Circle Richmond, Virginia 23233 Invoice No. 6-99 January 31, 1999

#### INVOICE

Contract Number -- Letter of Agreement dated August 4, 1998

SSS Project Number -- CNET1

Maximum Liability - Part I -- \$21,000

Maximum Liability - Part II -- \$8,000

Voucher Number -- V - 2

For consulting services performed related to Part I of the above cited letter of agreement. Re: Developing the Surgical Outcome Information Exchange (SOIE) During the period January 1-31, 1999.

Total Due

\$5,250.00

1/20

Sincerely,

Flavia A. Threatt Accounting Manager

an employee-owned company

Chironet, LLC 1899-a Billingsgate Circle Richmond, Virginia 23233 Invoice No. 61.99 March 31, 1999

#### INVOICE

Contract Number

Letter of Agreement dated August 4, 1998

SSS Project Number

CNET1

Maximum Liability - Part I

-- \$21,000

Task 1.1 - 1.2 - 1.3

Maximum Liability - Part II

\$8,000

Task 1.4

Voucher Number

V - 5

For services performed, Re: Developing the Surgical Outcome Information Exchange (SOIE) During the period March 1-31, 1999.

	Rate	Current Period		Cumulative	
Personnel		Hours	Cost	Hours	Cost
Task 1.1 - 1.2 - 1.3					\$21,000.00
					•
Task 1.4					404.00
Sr. Systems Analyst	\$106.00	4	\$424.00	4	424.00
Systems Analyst	92.00				
Sr. Programmer Analyst	81.00				
Programmer Analyst	75.00				
Sr. Programmer	62.00				
Programmer/Technical Specialist	57.00				-
Total		4	\$424.00	4	\$21,424.00

TOTAL DUE

\$424.00

Sincerely,

Flavia A. Threatt

Accounting Manager

Patent Application Attorney Docket No.: 58367.000003

### EXHIBIT D

#### MARKETING AGREEMENT

An Agreement made and effective this day of day of ("Effective Date"), by and between McKesson General Medical Corp., d/b/a McKessonHBOC Medical Group, with offices at 8741 Landmark Road, Richmond, Virginia 23228 and its designated affiliated companies ("McKessonHBOC Medical Group") and Surgical Outcomes and its affiliated companies, with offices at 1899-A Billingsgate Circle, Richmond, Virginia 23233-4243 ("Surgical Outcomes").

WHEREAS, McKessonHBOC Medical Group distributes medical products and equipment on a nationwide basis to over one thousand (1,000) surgery center customers of McKessonHBOC Medical Group ("Customers"); and

WHEREAS, Surgical Outcomes owns, markets, and sells software systems with outpatient surgery center benchmarking applications that help make surgery centers more efficient and cost effective and reduce the cost of healthcare as more fully described in <a href="Exhibit A">Exhibit A</a> attached to this Agreement ("System"); and

WHEREAS, Surgical Outcomes wishes to receive, and McKessonHBOC Medical Group is willing to provide promotion and marketing services for the System and any other products and Services of Surgical Outcomes made available to surgery centers ("Products") to Customers interested in purchasing software systems, products and services like the System and Products;

NOW, THEREFORE, McKessonHBOC Medical Group and Surgical Outcomes agree as follows:

- 1. Term. The initial term of this Agreement shall be for a period of five (5) years ("Initial Term") and shall automatically renew for successive terms of one (1) year each year thereafter.
- Obligations of McKessonHBOC Medical Group. McKessonHBOC Medical Group shall serve as a broker of the System and Products to surgery centers and provide the brokerage services, as described below:
  - 2.1 Promotional Materials. McKessonHBOC Medical Group's sales representatives will use reasonable efforts to market the System and Products to Customers by leaving promotional materials provided by Surgical Outcomes regarding the System and Products with Customers that express an interest in a software systems, services and products like the System and Products. Surgical Outcomes represents that the System and Products are not reimbursable under any federal insurance program nor included as a cost on any Medicare cost report. McKessonHBOC Medical Group shall inform Surgical Outcomes of Customers interested in the System and/or Products.
  - Training Fee. McKessonHBOC Medical Group shall waive for Surgical Outcomes McKessonHBOC Medical Group's initial training fee to surgery center vendors for the surgical account manager team launch, which is Four Thousand Dollars (\$4,000.00). The training fee for additional training sessions shall be determined by McKessonHBOC Medical Group and Surgical Outcomes at the time such sessions are scheduled.
  - 2.3 Ongoing Customer Service. McKessonHBOC Medical Group shall contact on a regular basis, at least annually, each Customer that obtained the System in part due to any sales activity directly or indirectly provided by McKessonHBOC Medical Group. McKessonHBOC Medical Group shall use its reasonable efforts to have such contact with such Customer's

principal administrator of such System. Such contact shall include the administration of a a customer-satisfaction questionnaire and other such other customer service normally provided by McKessonHBOC Medical Group sales representatives to Customers in the course of marketing and customer retention.

- 3. Obligations of Surgical Outcomes. When Customers are identified by McKessonHBOC Medical Group, Surgical Outcomes shall promote and, if necessary, demonstrate the System in such a manner as in Surgical Outcomes's judgment is economically feasible to such Customers.
  - 3.1 Prices. The price for a System offered to a Customer by Surgical Outcomes shall be as low as or lower than the price offered by Surgical Outcomes for a similar system to any surgery center customer of a size similar to that of such Customer. The per unit price for the System offered to a Customer that purchases more than one System shall be as low as or lower than the per unit price offered by Surgical Outcomes to any surgery center customer that purchases (or commits to purchase) the System in quantities comparable to the quantities purchased by such Customer.
    - 3.1.1 Billing. Surgical Outcomes shall bill customers for any System or Product purchased by such Customers and collect any associated amounts due. McKessonHBOC Medical Group shall have no obligation for any amounts any Customer may owe Surgical Outcomes.

#### 3.2 Promotional Fee.

- 3.2.1 Sales and Fees. Each quarter, Surgical Outcomes shall pay to McKessonHBOC Medical Group a promotional fee equal to twenty-five percent (25%) of all revenues received by Surgical Outcomes from each Customer for any System and/or any Product.
- 3.2.2 Payment. Such promotional fee payments on amounts received by Surgical Outcomes in a calendar quarter shall be made by Surgical Outcomes to McKessonHBOC Medical Group by the fifteenth day of the following the end of the calendar quarter. The frequency of payments may be changed from quarterly to monthly payments when such promotional fees exceed Five Thousand Dollars (\$5,000.00) per quarter.

#### 3.3 Promotional and Marketing Materials.

- 3.3.1 Surgical Outcomes shall provide to McKessonHBOC Medical Group for its promotional use adequate marketing, advertising, and product literature relating to the System and Products. This literature is subject to McKessonHBOC Medical Group's prior approval, which shall not be unreasonably withheld.
- 3.4 Exclusivity. While this Agreement is in effect Surgical Outcomes shall not knowingly make the System or any Product available for brokerage, supply, distribution, or marketing directly or indirectly to, or conduct any promotional activity with, any company that competes with McKessonHBOC Medical Group, including, without limitation, Allegiance Healthcare Corporation, Owens & Minor, Neoforma.com, Cardinal Health Care, Physician Sales and Service, Gulf South and Bergen Brunswig ("Competitor"). Notwithstanding the commitment in this Subsection 3.4 above, Surgical Outcomes shall have the right to interface its data entry elements to system solution providers, such as Temple Surgery Systems and Surgery Center Information Systems, Inc.

- 3.5 Web Links. Surgical Outcomes shall permit McKessonHBOC Medical Group to link its web sites to Surgical Outcomes web sites. Surgical Outcomes shall not permit any Competitor to link to any of its web sites.
- 3.6 **Sustaining Member.** During the term of this Agreement, Surgical Outcomes shall list McKessonHBOC Medical Group as a sustaining member.
- 4. Confidentiality Obligations. Any disclosures made by a party ("Disclosing Party") to the other ("Receiving Party") concerning any information regarding the Disclosing Party's customers, including, without limitation, such customer's names and addresses, and/or any other information which the Disclosing Party specifically identifies as being confidential at the time of disclosure ("Information") shall be held in confidence by the Receiving Party and not disclosed by the Receiving Party to any third party nor used by the Receiving Party to the Receiving Party's advantage, except as contemplated herein, without the prior express written consent of the Disclosing Party. Any list of Customers shall be deemed Confidential to McKessonHBOC Medical Group.
  - 4.1 Precautions. The Receiving Party will take all reasonable precautions, including adequate procedures and disciplines, to safeguard the confidential nature of such Information. The Disclosing Party agrees that the same procedures which the Receiving Party would use to protect its own confidential and proprietary Information shall be deemed adequate to satisfy its obligation of confidentiality hereunder.
  - 4.2 Exceptions. The Receiving Party's obligation to maintain the Information disclosed in confidence hereunder shall <u>not</u> apply if the Information is known to the Receiving Party when received or is approved for release in writing by the Disclosing Party. The burden of proving the applicability of any of the exceptions above shall be on the Receiving Party.
  - 4.3 **Survival.** The obligations regarding Information, described above, shall survive any cancellation or termination of this Agreement for a period of five (5) years after the effective date of such cancellation or termination.
- 5. Contact With McKessonHBOC Medical Group's Customers.
  - 5.1 Customers will be aware that McKessonHBOC Medical Group has referred their name to Surgical Outcomes as a sales consultant for and licensor of the System and/or Products. Surgical Outcomes acknowledges that McKessonHBOC Medical Group's business relationships with customers, including its goodwill with such customers, are valuable assets of McKessonHBOC Medical Group. Surgical Outcomes agrees that it shall not knowingly or intentionally conduct itself in a manner that will adversely affect McKessonHBOC Medical Group's relationships, including, without limitation, its goodwill, with any of McKessonHBOC Medical Group's customers.

#### 6. Indemnification.

6.1 McKessonHBOC Medical Group shall have no obligation with respect to the System or any Product, any sales, license, or other agreement arising out of Surgical Outcomes's contact with a Customer, or the performance of Surgical Outcomes or an Customer under such agreements. Surgical Outcomes shall defend, indemnify, and hold harmless

McKessonHBOC Medical Group and its affiliated and subsidiary companies, and the officers, directors, employees, and agents of each of them from and against any and all losses, damages, liabilities, or claims ("Liabilities") caused by or arising out of Surgical Outcomes' negligence or willful misconduct, the System or any Product, any related agreements entered into by Surgical Outcomes and Customers concerning the System or any Product, or the obligations assumed by Surgical Outcomes or a Customer under such agreements. This <u>Subsection 8.1</u> shall not apply to Liabilities arising from incomplete, outdated, or otherwise incorrect information provided by or on behalf of McKessonHBOC Medical Group to Surgical Outcomes upon which Surgical Outcomes relies with respect to the Special Enhancements or other Surgical Outcomes products or services designed or produced based on such incomplete, outdated or incorrect information.

- 6.1.1 Surgical Outcomes shall maintain liability insurance for bodily injury and property damage, with contractual broad form vendor liability coverage extended to McKessonHBOC Medical Group and a minimum combined single limit of Five Million Dollars (\$5,000,000.00) per occurrence. Surgical Outcomes shall furnish to McKessonHBOC Medical Group a certificate of insurance evidencing such coverage, certifying that the policy or policies of insurance described in such policy will not be altered, modified or canceled without giving McKessonHBOC Medical Group at least thirty (30) days advance written notice.
- 6.2 McKessonHBOC Medical Group shall defend, indemnify, and hold harmless Surgical Outcomes and its affiliated and subsidiary companies, and the officers, directors, employees, and agents of each of them from and against any and all losses, damages, liabilities, or claims caused by or arising out of McKessonHBOC Medical Group's negligence or willful misconduct.
- 6.2.1 McKessonHBOC Medical Group shall maintain liability insurance for bodily injury and property damage, with contractual broad form vendor liability coverage extended to Surgical Outcomes and a minimum combined single limit of Five Million Dollars (\$5,000,000) per occurrence or comparable program of self-insurance. McKessonHBOC Medical Group shall furnish to Surgical Outcomes a certificate of insurance evidencing such coverage, certifying that the policy or policies of insurance described in such policy will not be altered, modified or canceled without giving Surgical Outcomes at least thirty (30) days advance written notice.
- 7. **Termination.** This Agreement may only be terminated for cause. "Cause" exists if the other party (i) shall be insolvent or unable to pay its debt as they come due; or (ii) has a bankruptcy, insolvency, reorganization, debt adjustment, liquidation, or receivership proceeding instituted by or against it; or (iii) breaches any material term of this Agreement; or (iv) defaults in payment or is consistently late in payment of any monies due; or a party acquires, merges or is acquired by a direct competitor of the other party. Cure for any cause may be effected during the period of notice.

#### 8. Miscellaneous.

- 8.1 **Binding Effect.** This Agreement shall be binding upon the parties to this Agreement individually, their successors and assigns.
- 8.2 Governing Law. This Agreement shall be deemed to be made in the Commonwealth of Virginia and shall in all respects be interpreted, construed, and governed by and in

accordance with the laws of the Commonwealth of Virginia without any presumption or construction against the party causing the Agreement to be drafted.

- 8.3 Counterparts. This Agreement shall be executed simultaneously in one (1) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute and be the same instrument.
- 8.4 Severability. In the event any portion of this Agreement is deemed to be contrary to law, the remaining provisions of this Agreement shall continue to be valid and binding upon all parties.
- 8.5 Independent Contractors. The relationship between the parties to this Agreement shall be that of independent contractors. Under no circumstances shall either party to this Agreement act or attempt to act, or represent itself, directly or indirectly, as an agent of the other party to this Agreement, except as expressly contemplated herein.
- 8.6 Disclaimer. IN NO EVENT SHALL EITHER PARTY BE LIABLE TO THE OTHER FOR INCIDENTAL, INDIRECT, SPECIAL, OR CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFITS) FROM ANY CAUSE.
- 8.7 Exhibits. The following exhibits are attached to this Agreement and all exhibits are hereby incorporated herein and made a part of this Agreement:

Exhibit A - The System

9. Entire Agreement. This Agreement merges or cancels all prior negotiations, understandings or agreements between the parties, oral or written, and constitutes the entire Agreement of the parties with respect to the subject matter of this Agreement.

IN WITNESS WHEREOF, the parties hereto have signed and dated this Agreement in the spaces provided below.

MCKESSON GENERAL MEDICAL CORP.	SURGICAL OUTCOMES
By: Hal Walst	By: Luxtoseel
Title: VP SC	Title: Member_
Date: 7/8/57)	Date: 7/20/00

Surgical Outcomes July 7, 2000

#### **EXHIBIT A**

SYSTEM DESCRIPTION (Attach Description)

The company's Outcomes Monitoring System ("System") for ambulatory surgery centers is a software system that enters, uploads and stores patient information submitted over the Internet from local freestanding (non-hospital based) ambulatory surgery centers. Submitted patient information is stripped of any personal identifying information, yet the system allows the local freestanding surgery center to identify their own patients. The data is processed to create graphical and tabular reports. Averages and other performance statistics are calculated yielding an industry standard. Graphic and tabular performance comparison reports are posted on the Internet. Users are given a unique passcode to access only their own performance reports over the Internet.

Patent Application Attorney Docket No.: 58367.000003

#### EXHIBIT E

**September 24, 2000** 

Allen Kendall Vice President Social & Scientific Systems, Inc. 7101 Wisconsin Avenue, Suite 1300 Bethesda, MD 20814-4805

#### Dear Allen:

Thank you for looking at our final documentation. I was hoping you could provide a letter with a frank critique of the documentation and suggestions for improvement. We certainly appreciate your hard work on our project and thank you for doing this final task.

Sincerely,

Louis F. Rossiter, Ph.D.

**Enclosures** 

Patent Application Attorney Docket No.: 58367.000003

EXHIBIT F



### UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231

APPLICATION NUMBER FILING DATE GRP ART UNIT FIL FEE REC'D ATTY.DOCKET.NO DRAWINGS TOT CLAIMS IND CLAIMS

60/252,129

11/21/2000

75

58367.000002

**CONFIRMATION NO. 8842** 

21967 HUNTON AND WILLIAMS 1900 K STREET N W WASHINGTON, DC 20006 DOCKETED

FILING RECEIPT

\*CC00000005733952\*

Date Mailed: 06/08/2001

Receipt is acknowledged of this provisional Patent Application. It will not be examined for patentability and will become abandoned not later than twelve months after its filing date. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Customer Service Center. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

#### Applicant(s)

Vladislav Olchanski, Richmond, VA; Viktor E. Bovbjerg, Richmond, VA; Stephen E. Zimberg, Plantation, FL; Louis F. Rossiter, Richmond, VA; Vadim Polyakov, Richmond, VA; Jennifer S. Green, Richmond, VA;

If Required, Foreign Filing License Granted 02/04/2001

Projected Publication Date: N/A

Non-Publication Request: No

Early Publication Request: No

Data entry by : DURHAM, DESHAWN

\*\* SMALL ENTITY \*\*

Title

Medical benchmarking technique

Team: OIPE

Date: 06/08/2001



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#### EXHIBIT G



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WASHINGTON, D.C. 20231 www.uspto.gov

APPLICATION NUMBER FILING DATE GRP ART UNIT FIL FEE REC'D ATTY.DOCKET.NO DRAWINGS TOT CLAIMS IND CLAIMS 09/996.475 11/20/2001 2152 564 58367.000003 23 25 5

> **CONFIRMATION NO. 2706 UPDATED FILING RECEIPT**

Thomas E. Anderson, Esq. **Hunton & Williams** 1900 K Street, N.W. Washington, DC 20006-1109

"OC000000007696775"

Date Mailed: 03/25/2002

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#### Applicant(s)

Vladislav Olchanski, Richmond, VA;

Viktor E. Bovbjerg, Richmond, VA;

Stephen E. Zimberg, Weston, FL;

Louis F. Rossiter, Richmond, VA;

Vadim Polyakov, Richmond, VA;

Jennifer S. Green, Lynchburg, VA;

Domestic Priority data as claimed by applicant

THIS APPLN CLAIMS BENEFIT OF 60/252,129 11/21/2000

Foreign Applications

If Required, Foreign Filing License Granted 01/03/2002

Projected Publication Date: 06/27/2002

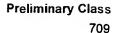
Non-Publication Request: No

Early Publication Request: No

\*\* SMALL ENTITY \*\*

Title

Performance outcomes benchmarking



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